An exploration of gender differences in the coping skills, attributions, expressed emotion, and mental health of caregivers of people with alcohol problems.

By

Jane Louise McNicholas

Thesis submitted in partial fulfilment of the requirements for the award of Doctorate in Clinical Psychology (d. clin. psychol.)

University of Edinburgh

August 2009

D. Clin. Psychol. Declaration of own work

This sheet must be filled in (each box ticked to show that the condition has been met), signed and dated, and included with all assessments - work will not be marked unless this is done

Name:

Assessed work Case Study SSR Essay Question Paper Thesis
(please circle)

Title of work: **An exploration of gender differences in the coping skills, attributions, expressed emotion, and mental health of caregivers of people with alcohol problems.**

I confirm that all this work is my own except where indicated, and that I have:

- Composed and undertaken the work myself ☑
- Clearly referenced/listed all sources as appropriate ☑
- Referenced and put in inverted commas any quoted text of more than three words (from books, web, etc) ☑
- Given the sources of all pictures, data etc. that are not my own ☑
- Not made undue use of essay(s) of any other student(s) either past or present (or where used, this has been referenced appropriately) ☑
- Not sought or used the help of any external professional agencies for the work (or where used, this has been referenced appropriately) ☑
- Not submitted the work for any other degree or professional qualification except as specified ☑
- Acknowledged in appropriate places any help that I have received from others (e.g. fellow students, technicians, statisticians, external sources) ☑

I understand that any false claim for this work will be penalised in accordance with the University regulations ☑

Please note:

a) If you need further guidance on plagiarism, you can:

i/ Speak to your director of studies or supervisor

ii/ View university regulations at http://www.aaps.ed.ac.uk/regulations/Plagiarism/Intro.htm

ACKNOWLEDGEMENTS

I am very grateful to a variety of people for their help and support in the completion of this thesis.

I would like to thank my supervisor, Mike Hopley for his advice, encouragement, and positivity throughout.

Thank you also to all the staff members of the alcohol problems service who helped me with the recruitment of participants, and to Eunice Reed, Dr Jonathan Chick, and Dr Malcolm Bruce for their advice along the way.

Finally I would like to thank my family, friends, and colleagues who have supported me over the past five years.

ABSTRACT

Background

Despite there being a large amount of literature and research looking at the coping skills and mental health of caregivers of people with alcohol problems, little is known about other factors that could influence the mental wellbeing of caregivers of people with alcohol problems. Expressed emotion has been examined in relationships where alcohol problems exist, however only with respect to its impact on the relapse rates of the drinker. Mental health research has also found that female caregivers have poorer mental health outcomes than their male counterparts and that attributions made by the caregiver regarding the illness can impact on the mental wellbeing of the caregiver. The current study aimed to examine the differences between male and female caregivers of people with alcohol problems in terms of their coping skills, attributions, expressed emotion, and mental wellbeing.

Methods

The study recruited 35 female caregivers and 20 male caregivers of people with alcohol problems. Participants completed the Coping Questionnaire, the Family Attitude Scale (FAS), the Causal Dimensions Scale, and the General Health Questionnaire-12.

Results

The study found that female caregivers had significantly higher scores than males on the GHQ-12. Both males and females engaged predominantly in coping strategies that were related to poor mental health. Specific attributions made by male caregivers

were associated with poor mental health and high expressed emotion. For females, tolerant-inactive coping was also associated with high expressed emotion.

Conclusions

The results suggest that female caregivers of people with alcohol problems have poorer mental wellbeing than male caregivers. Both male and female caregivers report frequently using coping styles which are associated with poorer mental wellbeing and higher levels of expressed emotion. Even when the person with the alcohol problem is engaged with treatment services, caregivers warrant treatment and support in their own right to help them cope in a manner which is more beneficial to their own mental wellbeing. Interventions offered to caregivers should consider the impact of factors such as expressed emotion and attributions on the coping and mental health of the caregiver.

CONTENTS

LIST OF TABLES AND FIGURES

TABLES

FIGURES

1. INTRODUCTION

1.1. Background

1.1.1. Alcohol Dependence

According to the Scottish Intercollegiate Guidelines Network (SIGN, 2003), symptoms of mild alcohol dependence are present in 250,000 Scottish people at any one time, which amounts to approximately 5% of the population. SIGN also reported that the number of people with moderate to severe symptoms is in the region of 16,000. According to the Scottish Health Survey 2003, more than one third of men drink in excess of 21 units of alcohol each week, and 14 per cent of women drink in excess of the recommended 14 units of alcohol per week. These percentages have increased from previous Scottish surveys (Scottish Health Survey, 2003) and indicate that an increasing number of people are drinking above the recommended levels. In the year 2000, in Scotland, 107,685 General Practitioner (GP) consultations were for alcohol-related conditions, with alcohol dependence being the most common of these (69%), with twice as many of these consultations being made by men than women. In the same year, three in every 100 acute inpatient admissions to hospital were for alcohol-related illnesses (Scottish Health Survey, 2003). Alcohol-related deaths trebled during the course of the 1990s (SIGN, 2003).

According to the United Kingdom Cabinet Office Strategy Unit, in 2001 there were 2.8 million "dependent drinkers" in the UK (Cabinet Office Strategy Unit, 2003). This disorder is characterised by persistent engagement in a behaviour which can lead to physical and psychological ill health, as well as having profound social consequences. These effects are pervasive and debilitating both for the individual with the dependence and for his/her family and friends. Physical effects of alcohol dependence

include cardiovascular diseases, stroke, cirrhosis of the liver, increased cancer risk, alcohol-related brain damage, and death (National Institute on Alcohol Abuse and Alcoholism, 2000). Mental health problems associated with alcohol dependence include anxiety, depression, and panic disorders (Kushner *et al.,* 2005). The social manifestations of the disorder can include loss of employment, inappropriate social behaviour due to disinhibition, relationship problems, marital conflict, and violent, aggressive, or unpredictable behaviour. Due to the nature of alcohol dependence the course of the disorder is difficult to predict. The World Health Organisations International Classification of Diseases (ICD-10) defines alcohol dependence as the following:

"*Three or more of the following manifestations should have occurred together for at least one month or, if persisting for periods of less than one month, should have occurred together repeatedly within a 12-month period:*

- *a strong desire or sense of compulsion to consume alcohol;*
- *impaired capacity to control drinking in terms of its onset, termination, or levels of use, as evidenced by:*
    - *alcohol being often taken in larger amounts or over a longer period than intended; or*
    - *a persistent desire to or unsuccessful efforts to reduce or control alcohol use;*
- *a physiological withdrawal state when alcohol is reduced or ceased, as evidenced by:*
    - *the characteristic withdrawal syndrome for alcohol, or*

- *by use of the same (or closely related) substance with the intention of relieving or avoiding withdrawal symptoms;*

- *evidence of tolerance to the effects of alcohol, such that:*
  - *there is a need for significantly increased amounts of alcohol to achieve intoxication or*
  - *the desired effect, or a markedly diminished effect with continued use of the same amount of alcohol;*
- *preoccupation with alcohol, as manifested by:*
  - *important alternative pleasures or interests being given up or reduced because of drinking; or*
  - *a great deal of time being spent in activities necessary to obtain, take, or recover from the effects of alcohol;*

Persistent alcohol use despite clear evidence of harmful consequences, as evidenced by continued use when the individual is actually aware, or may be expected to be aware, of the nature and extent of harm." (ICD-10, 1992).

It could be argued that many of the criteria outlined by ICD-10 are subjective in nature, particularly in relation to reduction in alternative interests and pleasures and also the reference to "a great deal of time" being spent on alcohol related activities. It is possible that these criteria could be interpreted differently depending on the perceptions of the person with the problem or those involved in his or her care.

Based on the criteria outlined above, individuals with alcohol dependence are persistent with their alcohol use despite the evident demise of their physical, psychological, and social wellbeing. According to a recent Scottish Government consultation document on alcohol misuse in Scotland, the total cost in 2006-2007 of

alcohol misuse was in the region of £2.2 billion. These costs were inclusive of NHS costs, loss of productivity costs, social work costs, criminal justice costs, and human costs (Changing Scotland's relationship with alcohol, 2008). These figures demonstrate the debilitating impact of alcohol misuse across many areas of society, encompassing health care, social care, and industry.

1.1.2. Caregiver[a] research

There exists a significant evidence base which indicates that caregivers of people with mental illness experience negative mental health and wellbeing as a result of the demands of the caregiving role (e.g. Fuller-Jonap & Haley, 1995; Goossens *et al.*, 2008; Perlick *et al.,* 2005). The concept of caregiver distress and the dynamics of a caregiving relationship have been receiving more and more attention in health care research over the past two decades (Gutierrez-Maldonado *et al.,* 2005; Hooley & Licht, 1997; Tarrier *et al.,* 2002). In the case of mental illnesses, family members are increasingly expected to take on the role of carer for another as there is a shift away from long term inpatient rehabilitation (Wijngaarden *et al.,* 2002). Yates (1988) reported that within the UK, treatment for alcohol problems moved towards a community-based approach as it was acknowledged that alcohol problems should be treated in an environment where the natural influences associated with drinking could be factored into the treatment process (Orford & Edwards, 1977).

The role of caregiver is often a role which an individual acquires rather than chooses, due to family or spousal obligations. An early study into the influence of mental illness on family life demonstrated that it is wide ranging and encompasses many

[a] *A caregiver is defined as "a person of any age who provides, or intends to provide, unpaid help and support to a relative, friend or neighbour who cannot manage to live independently without the carer's help, due to frailty, illness, disability or addiction"*, (NHS Lothian, 2008)

aspects of life, including work, income, children, health, and relationships with family and friends (Grad & Sainsbury, 1968). A variety of studies have demonstrated the impact of caregiving in different mental illnesses, including schizophrenia (Dyck *et al.,* 1999; Gutierrez-Maldonado *et al.*, 2005; Ukpong, 2006), Dementia (Fuller-Jonap & Haley, 1995; Tarrier *et al.*, 2002), and bi-polar disorder (Goosens *et al.*, 2008; Perlick *et al.*, 2005).

There are several chronic mental health problems, including Alzheimer's disease and schizophrenia which are comparable to alcohol dependence with regards to symptomatology and pervasiveness across different areas of functioning. One complication of alcohol dependence is the development, for some, of alcohol-related brain damage (ARBD), which includes Wernickes enchephalopathy and Korsakoff syndrome. Wernickes encephalolpathy is characterised by short-term memory impairment and confusion (Aminoff *et al.,* 2005). Korsakoff syndrome is a syndrome characterised by disorientation, confabulation, and severe memory impairment (Guido *et al.,* 1994). Other symptoms associated with alcohol-related brain damage are: impairments in attention and problems with executive functions (i.e. problem solving, organising, planning, abstract thinking and impulse control), as well as subsequent negative behaviour changes, including difficulties with emotional outbursts, impulsive behaviour, and neglecting personal hygiene (SAMH, 2006). Alzheimer's disease is characterised by deficits/changes in the following areas: executive functioning, memory, and behaviour (Waldemar *et al.,* 2007). It could be argued that these deficits and changes are similar to those associated with ARBD. The course and progression of Alzheimer's disease differs for each individual although it is degenerative and, at present, incurable for all sufferers. Alzheimer's disease also has similarities with alcohol dependence (without ARBD) in that mood swings, confusion, and irritability

are often present in people with these disorders. Although it is acknowledged that the causes of these different illness manifestations are entirely different, it is noteworthy that caregivers of people with Alzheimer's disease may have similar experiences to caregivers of people with alcohol dependence with regard to changes in personality, the unpredictability of the illness, communication difficulties, and memory impairment.

Much research has been carried out into the psychological impact of caring for elderly relatives or those with dementia (Baumgarten *et al.,* 1992; Draper *et al.,* 1992; Dura *et al.,* 1991). A meta-analysis of such studies was conducted by Pinquart and Sorensen (2003). The aim of their study was to determine whether caregivers differ from noncaregivers with regards to physical and psychological health, and, if such differences occur, which elements of physical and psychological health have the greatest effect. The study focused on caregivers of elderly relatives with and without dementia, and highlighted some of the main difficulties which may be experienced when caring for an elderly person such as uncertainty regarding the course of an illness, physical and verbal aggression, and confusion. The analysis focused on general symptoms of stress which could be measured in both groups, caregivers and non-caregivers, such as depression, physical health and self-efficacy rather than focusing on such variables that are specific to the caregiving task, including economic burden and social impact. The authors expected to find that caregivers would report more stress and depression, and poorer well-being than non-caregivers as a result of the demands of caregiving, possible restrictions in the personal life of the carer, and other factors relating to the illness of the care recipient. They predicted that the highest differences between the groups would be found for stress and self-efficacy on

the basis that stress has been found to be more directly related to a caregiving task than depression (Kinney *et al.,* 1995). Larger differences were also predicted between carers of people with dementia as opposed to other illnesses, for older caregivers rather than for younger caregivers, and for spouses rather than other relatives.

The authors concluded that caregivers fare less well than noncaregivers in the domains of physical wellbeing, subjective wellbeing, stress, depression, and self-efficacy. The study was unable to determine the primary variable in determining differences between caregivers and noncaregivers, as caregiving itself accounted for only 8% of the variance. Since the study did not take into consideration the factors which could be deemed specific to the caregiving task, it is difficult to know how the unique variable of "caregiving" was defined. This may be a reason why caregiving accounted for such a small percentage of the variance, suggesting the cited variance may not be a true reflection of the impact of caregiving. The authors also found that the differences between caregivers and noncaregivers were higher for psychological symptoms as opposed to physical health symptoms, which they postulated could be due to the uncertain nature of the caring role and the increased levels of fatigue and stress experienced by caregivers. The study found that spousal caregivers reported higher levels of burden and depression than adult children or other relatives. With regard to their final research question, the analysis found that caring for a person with dementia was associated with higher levels of negative symptoms than caring for non-demented persons. The authors suggested that this was due to the specific difficulties associated with dementia, including disorientation, behaviour problems, and personality changes in the patient. They concluded that the focus of interventions for caregivers should be to reduce the amount of care they have to give, help them to

manage their own caregiving experience, and help them to deal with the symptoms of depression and stress by addressing negative thinking. In light of the latter finding of Pinquart and Sorenson (2003), the nature of the caregiving role in alcohol problems, with or without ARBD, may be comparable to the caregiving role in dementia, in terms of uncertainty about the course of the illness, physical and verbal aggression, and confusion of the person with the disorder. The author is unaware of any such study which compares the two disorders in this respect.

Schizophrenia is a pervasive and severe brain disorder characterised by positive symptoms (e.g. delusions, hallucinations, and speech disorder) negative symptoms (e.g. difficulty with planning, loss of pleasure in everyday life, self-neglect, social withdrawal, and anhedonia), and cognitive deficits (executive dysfunction, and problems with attention) (ICD-10, 1992). Once again it is acknowledged that although the causes of symptoms and illness manifestations differ greatly for the disorders, it could be argued that many of the negative symptoms and cognitive impairments associated with schizophrenia are similar to those found in other conditions, including alcohol dependence. Furthermore, both schizophrenia and alcohol dependence are associated with co-morbid psychological problems, including depression and anxiety disorders. Again, it could be argued that family members of people with schizophrenia and family members of people with alcohol problems may have similar caregiving experiences. Dyck *et al.,* (1995) found that caregivers of patients with schizophrenia report experiencing higher levels of depression when compared with non-caregiving controls. Gutierrez-Maldonado *et al.* (2005) found that family members of people with schizophrenia reported high levels of health problems, reported burden, and functional impact, i.e. emotional problems, and physical and social functioning problems.

Oldridge and Hughes (1992) found that 36% of a sample of caregivers of people with schizophrenia was found to have symptoms when assessed using the General Health Questionnaire or the Hospital Anxiety and Depression Scale.

Whilst alcohol dependence may share many of the same features as the other mental illnesses discussed above, it could be argued that it differs greatly from these other disorders with respect to how it is perceived in society and the causal factors of the disorder. Whilst the consumption of alcohol is necessary to form alcohol dependence, the use of alcohol does not predict the development of the disorder, i.e. not everyone who drinks alcohol develops alcohol dependence. This concept could be one reason why there is much debate surrounding the theoretical models of alcohol dependence and the causes of the disorder. Another factor which should be considered when thinking about the specific role of a caregiver of a person with alcohol dependence is denial and minimisation on the part of the alcohol user. Often times the individual with the dependence will be in a state of denial about the problem, and will be unwilling to seek out or engage in treatment. It could be argued that this leads to further strain on a caregiver as denial and minimisation in the face of a problem may lead to arguments and tension within a relationship, which could increase the level of stress experienced by the caregiver. Orford *et al.* (1998) examined the most common causes of stress and strain for family members of people with substance and alcohol misuse problems. These were identified as: concerns over the health of the person with the problem, finding the individual with the problem unpleasant to be around, financial concerns, fears regarding the impact of the problem on the family, anxiety, worry, and low mood. On a more practical note, the role of the caregiver of a person with an alcohol problem can include cleaning up after the drinker, financially

supporting the drinker, constantly supervising and monitoring the individual's behaviour, attending to the physical needs of the person with the alcohol problem when they are intoxicated or in a state of withdrawal, accompanying him/her to health care appointments (Orford *et al.,* 1998), and supervising a medication regime when the individual stops drinking. In cases where the person with the alcohol problem has developed alcohol related brain damage, the role of the caregiver can be more demanding as help and support may be required with all aspects of daily living, including personal hygiene, cooking, and constant prompting to remember daily routines (SAMH, 2006).

1.2. Theories of Alcohol Dependence

A variety of distinct theories have been proposed to explain Alcohol Dependence over the years, including Bandura's (1969) social learning theory, and Jellinek's (1960) disease model. According to Bandura's (1969) social learning theory of alcohol dependence, "Alcoholics are people who have acquired, through differential reinforcement and modelling experiences, alcohol consumption as a widely generalised dominant response to aversive stimulation" (p.536). According to this theory, alcohol use is initially reinforced by perceived reductions in levels of stress and tension for the individual; however prolonged misuse is maintained by the development of physical dependence and withdrawal avoidance. Bandura posited that all alcohol use is governed by the same theoretical principles regardless of whether the drinking is moderate or hazardous. The theory suggests that the development of alcohol dependence is based on a variety of factors, including modelling, reinforcement, expectations of the individual regarding alcohol and its effects, and also conditioned responding (Bandura, 1969). Since this theory is based on the idea

that the same model accounts for all drinking, not just alcohol dependence, it may be difficult for families to understand why one family member can develop alcohol dependence whereas another can drink at a moderate level or not at all. Since alcohol consumption can occur on a social basis without the development of dependence, this may lead to confusion, frustration, and stress amongst family members and friends of those who go on to develop the disorder.

In contrast to the social learning theory of alcohol dependence, the disease model of alcohol dependence suggests that it is a disease of the brain, and is commonly referred to as an addiction (Jellinek, 1960; Morse & Flavin, 1992). A definition of the disorder was provided by Morse and Flavin (1992), "Addiction is a primary, progressive, chronic disease with genetic, psychosocial, and environmental factors influencing its development and manifestations. The disease is often progressive and fatal. It is characterized by impaired control over use of the substance, preoccupation with the substance, use of the substance despite adverse consequences, and distortions in thinking" (p.1012). A review of drug dependence (including alcohol) undertaken by McLellan *et al.* (2000) concluded that causal factors of alcohol dependence include genetic heritability, personal choice, and environmental factors. The authors argue that personal choice can be seen as a causal factor in many disorders including stress, obesity, and hypertension. The authors further concluded that drug dependence (including alcohol) leads to changes in the brain that are significant and pervasive, including changes to the levels of particular neurochemicals within the brain, and changes to the stress response system (McLellan *et al.*,2000). Whilst there are many disorders which have an aetiology based on genetic factors, personal choice, and environmental factors, there are few others which also have the same perceived negative social consequences as alcohol or drug dependence. Various studies have

demonstrated that people with alcohol or drug problems are considered to be the most deviant groups when compared to other potentially deviant groups (Ries, 1977; Rivers *et al.,* 1986). This may explain why it is perceived negatively in society and perhaps why much focus is placed on the personal choice aspect of the disorder rather than the genetic or environmental factors. The negative social consequences of alcohol dependence are likely to add to the levels of stress, burden, and negative emotions experienced by family members of people with alcohol dependence.

Whilst the two theories of alcohol dependence outlined above view alcohol problems in very different ways, current clinical practice tends to combine aspects of both these and other approaches to view alcohol problems from a bio-psycho-social perspective, incorporating aspects of Bandura's (1969) social learning model and also Jellinek's disease model (1960), not only to explain the development and maintenance of the problem, but also to inform treatment approaches.

1.3. Alcohol and the Family

It is well recognised that alcohol problems are a major concern in terms of health care resources and social problems (Changing Scotland's Relationship with Alcohol, 2008; Scottish Health Survey, 2003). The impact of living with a person with an alcohol problem has been demonstrated repeatedly in the literature (Collins, 1990; Copello, Orford, *et al.,* 2000; Svenson *et al.,* 1995). Copello, Orford, *et al.* (2000) suggested that for every one person with an alcohol problem two others are adversely affected, usually family members. Copello, Orford, *et al.* (2000) reported that family members of people with problems of dependence may experience mental health difficulties of their own, which warrant intervention. The authors provided a conservative estimate that approximately 4 million people in the UK will be dealing with a person with an

alcohol problem, and suffering as a result. This estimate is in keeping with the Cabinet Office Strategy Unit's (2003) figures on the number of dependent drinkers in the UK. Fadden *et al.* (2007) reported that family members of people with addictions report frequent anxiety, and frustration. Svenson *et al.* (1995) found that the increased levels of physical and psychosocial complaints experienced by family members of people with alcohol problems can lead to an increase in referrals to primary care health services. Continually coping with a person's constant drinking can have detrimental psychological and social effects on the individual (Collins, 1990). Elevated rates of stress-related diseases were found amongst family members of people with alcohol problems compared to controls, and these family members were also found to be more likely to present to their GP (Roberts & Brent, 1982). Copello, Orford, *et al.* (2000) suggest that although family members of people with alcohol problems may be treated in primary care for the symptoms they present, the cause of these symptoms is not always explored. This study aims to further explore the area of mental health of caregivers of people with alcohol problems in an attempt to determine what factors influence the mental wellbeing of caregivers of people with alcohol problems.

Miller (2003), in a commentary on the treatment of families of people with alcohol and drug problems, noted that the costs of health care for families prior to a family member receiving treatment for alcohol/drug problems are a lot higher than they are post treatment; no comment was provided on whether this is limited to families where the treatment for alcohol or drug problems has been successful. He suggested that family members have their own needs and should not just be viewed as an adjunct to the individual with the problem. For this reason the current research focuses on the

outcomes for caregivers alone, rather than focusing on the outcomes for the person with the alcohol problem.

According to Kaufman (1985), the family environment of a person with an addiction is generally characterised by conflict, poor interpersonal boundaries, and poor communication. Moos, Finney, *et al.* (1990) carried out a longitudinal study comparing spouses of people with an alcohol dependence that had stopped drinking, spouses of relapsed drinkers, and community controls at a two and ten-year follow-up. The study examined the social and psychological functioning of these three groups. The findings demonstrated that spouses of relapsed drinkers fared less well than spouses in the other groups. Spouses in the relapse group reported more stressful events, had fewer social outlets, consumed more alcohol, and reported less family cohesion than the remitted group and the control group at two-year follow up. Moos, Finney, *et al.* (1990) also reported that the functioning (e.g. alcohol use, psychological problems, physical symptoms, and occupational functioning) of the drinking partner accounted for much of the variance in measures of spousal depression (32%). The study also demonstrated a link between avoidant coping responses (avoidance of active problem confrontation) and poorer psychological well being.

Brennan *et al.* (1994) investigated the impact of problem drinking on spouses of people in later life with reference to the coping responses and functioning of the spouse, for example, physical symptoms, emotional problems and depression. These constructs were measured using the Coping Response Inventory (Moos, 1993) and the Health and Daily Living Form (Moos, Cronkite, *et al.,* 1990). The authors found that when compared to spouses of nonproblem drinkers, the spouses in the analysis

reported more physical symptoms, more symptoms of depression, and a greater use of cognitive-avoidance as a coping strategy, i.e. attempts to deny the gravity of a presenting problem. These spouses also reported receiving less family support. The authors concluded that the experiences of older spouses do not differ greatly from the experiences of younger spouses living with a problem drinking spouse (Brennan *et al.*, 1994).

The evidence cited above demonstrates that the experiences of family members of people with alcohol problems differ little from the experiences of people with other mental health problems. Caregivers of people with alcohol problems experience stress, anxiety, and poorer physical health in much the same way as caregivers of people with schizophrenia and Alzheimer's disease. There have been a number of factors, such as expressed emotion, coping skills, and causal attributions, which have been found to influence the caregiving relationship and have a subsequent impact on relapse rates, i.e. resurgence of disease symptoms, of patients with particular mental illnesses. An aim of the current study is to examine the relationships between these aforementioned factors to determine which are the most salient for caregivers of people with alcohol problems.

1.4. Factors identified as influencing caregiving

1.4.1. Expressed emotion

The role of a caregiver is not necessarily always a role chosen by any individual and it is often the case that this role becomes the only option for family members and close friends of individuals with physical and/or mental health problems. Much research has been carried out examining the role of a caregiver and the differing relationship

dynamics that are created by the caring role. The concept of expressed emotion (EE; Brown *et al.,* 1962) was introduced to describe aspects of close relationships and has been used extensively in research concerning caregivers and the cared for individual. Expressed Emotion is a measure of the positive comments, emotional over-involvement, warmth, hostility, and criticism evident in an interpersonal relationship (Wearden *et al.,* 2000). It was Brown and colleagues (1962) who first coined the phrase, as part of research into the emotions reported and observed in relationships between family members and schizophrenic patients. Since that time the term has been used extensively in research to determine specific predictors of relapse in psychiatric disorders, including schizophrenia (Butzlaff & Hooley, 1998; Kavanagh, 1992). Kavanagh (1992) carried out a review of research into the relationship between high EE and relapse in schizophrenia. The review found that of the 23 studies examined, which had a follow-up period of 9-12 months, 20 of them demonstrated a relationship between relapse rates and high EE in family environments.

Hooley and Hiller (2000) carried out a study examining the relationship between levels of EE amongst relatives of patients with schizophrenia and the personality characteristics of those relatives. They suggested that having knowledge about the types of personality characteristics associated with High and Low EE may help clinicians determine how families will cope with the management of chronic mental illness. On account of the large number of variables entered into the analysis, the authors reported their results with caution; they found that relatives high in EE reported feeling less capable and also reported being less optimistic about their own lives. Although this was an exploratory study with a modest sample size, this finding suggests that perhaps those relatives with High EE may be more likely to report

poorer general mental health, on account of being less optimistic and less capable. It is hoped that the current study will explore this finding further by examining the relationship between expressed emotion and mental health for caregivers of people with alcohol problems.

Although the concept of EE was originally conceived for use with Schizophrenic patients, it has been used with a variety of other mental illnesses over the years. A number of studies have reported a relationship between High EE relationships and depression (Vaughn & Leff, 1976a; Hooley, *et al.,* 1986), when the concept of Criticism is defined by the presence of two or more critical comments as measured by the Camberwell Family Interview (CFI; Vaughn & Leff, 1976b). The CFI is a semi-structured interview which takes 1-2 hours to complete and assesses the manner in which family members talk about each other, measuring hostility, criticism, emotional overinvolvement, positive comments, and warmth (Barrowclough & Hooley, 2003). Measurements of criticism are made by simply counting the number of critical comments made by the family member during the interview (Wearden *et al.,* 2000). Miklowitz *et al.* (1988) demonstrated a relationship between High EE and bi-polar disorder relapse; they reported that patients living in High EE households were 5.5 times more likely to relapse than those patients living in Low EE households (Miklowitz *et al.*, 1988). Szmukler *et al.* (1985) reported that parents of patients with anorexia nervosa or bulimia nervosa who did not remain in treatment had higher levels of emotional overinvolvement and criticism than those parents of patients who remained in treatment.

A study by Fichter *et al.* (1997) examined the relationship between the expressed emotion of relatives and relapse rates of people with alcohol problems. One aim of the study was to examine the robustness of EE as a predictor of relapse over an 18 month period. Fichter *et al.* (1997) found that higher numbers of critical comments were associated with relapse at 6 but not 18 months. They found no relationship between hostility and relapse, as few family members displayed hostility towards the drinker. The study demonstrated a contrary result to what was expected with regards to emotional overinvolvement. High levels on this construct were associated with abstinence at 18 months rather than relapse to drinking. Clark (2001), for example, found that a high level of positive involvement in families was associated with reduced relapse for patients who experienced co-morbid substance misuse and mental health problems. A high score on the concept of warmth was associated with lower levels of relapse at 6 months. As this was an exploratory study, the results reported by Fichter *et al.* (1997) were achieved only by examining all possible cut-off scores for each EE concept, except hostility. When the data were analysed using the median point for each construct, no significant relationship was found between EE and relapse at either 6 or 18 months. Further analysis revealed, however, that the number of critical comments made were a significant predictor of "survival time until relapse", i.e. the total number of weeks where there was no evidence of consumption of alcohol (Fichter *et al.*, 1997), and that this risk increased with each increase in critical comments.

Fichter *et al.* (1997) also reported that, although it is difficult to make direct comparisons with other mental illnesses, the relatives of alcoholics seemed to make fewer critical comments than relatives of depressed patients. Although this study did

not provide strong evidence for a relationship between relapse to alcohol use and EE, it did demonstrate a link between the number of critical comments made by a family member and relapse to drinking. It is possible that the strength of the relationship between relapse and expressed emotion could have been influenced by the inclusion criteria for the study. A requirement of the study was that participants had at least 5 hours contact with the person with the alcohol problem per week; however the authors were not specific regarding the nature of the contact; whether or not it was face-to-face, telephone, or other. It is possible that a stronger relationship between EE and relapse could have been found had the inclusion criteria been more specific regarding the nature of contact required between the person with the alcohol problem and the participant. The current study also assesses EE levels in family members of people with alcohol problems; however the inclusion criteria state that the participant must be living with the person with the alcohol problem, thus ensuring that the nature of the contact with the drinker is clearly understood for the purposes of the research.

O'Farrell *et al.* (1998) also carried out a study to investigate the impact of expressed emotion on relapse rates in alcohol. This study made reference to a theory put forward by Hooley (1987) which posited that high EE may result when family members attempt to cope by trying to exert control over behaviour where there is an impaired ability to control that behaviour by the patient, suggesting a link between coping style and expressed emotion. This theory is highly pertinent in the domain of alcohol problems as the ICD-10 criteria for alcohol dependence states that the disorder can be characterised by an "*impaired capacity to control drinking in terms of its onset, termination, or levels of use*" (ICD-10, 1992). Since controllability is impaired in alcohol dependence, this is suggestive of a link between a controlling coping style and

higher levels of EE being displayed by family members of people with alcohol problems.

O'Farrell *et al.* (1998) hypothesised that relapse rates would be higher 12 months after entering Behavioural Marital Therapy (BMT) for alcoholics whose spouses had higher levels of expressed emotion at the outset of treatment. The study was also interested in the potential protective effects of Antabuse medication and BMT sessions for patients living with High EE relatives. Antabuse, or disulfiram to refer to its generic name, is a drug used commonly in the treatment of alcohol dependence, which causes a violent physiological reaction should alcohol be consumed, thus acting as a deterrent to consumption. The impact of EE was only to be considered after other common relapse factors had been considered. Spouse's EE was measured using the Camberwell Family Interview. Their findings demonstrated that those alcoholics whose spouses were higher in EE had a higher rate of relapse and had a shorter time to relapse than those alcoholics with spouses low in EE. Specifically they found that hostility and criticism had a statistically significant relationship with relapse, whereas emotional overinvolvement did not. When comparing the effect size for their findings, the authors reported, with caution, that the relationship between alcohol relapse and EE has a stronger effect size than the relationship between relapse in schizophrenia and EE. The study also found a negative relationship between Antabuse compliance and relapse and also between attendance at BMT and relapse; however the positive effects of BMT were no longer evident 10-12 months after therapy participation. The authors suggested that those couples who engaged in BMT may have had higher levels of criticism than couples not engaging in this therapy. This could have acted as a trigger for drinking despite attendance at BMT. In the case where a relapse occurred

in the initial stages of BMT, this is likely to have fuelled more critical and hostile behaviour, thus creating a vicious circle of sorts (O'Farrell *et al.,* 1998). The authors suggested that in the initial stages it may have had the adverse effect of leading to a higher rate of relapse. In spite of this, the overall findings supported the idea that compliance with Antabuse treatment and attendance at BMT is linked with a reduced rate of relapse. The link between the use of Antabuse and reduced relapse even with spouses who scored highly on EE was explained in terms of a reduction in criticism and an increase in support by the spouse when the patient began Antabuse treatment (O'Farrell & Bayog, 1986). The authors stated that the purpose of BMT is to increase positive feelings in a relationship and to reduce negative communication. This process may directly impact on the levels of criticism and hostility displayed by a spouse in relation to their partner's drinking behaviour.

O'Farrell *et al.* (1998) acknowledged that those couples seeking BMT treatment may have already been higher in EE than other couples in the general population. They also stated that the link between EE and relapse may have been weakened by the influence of BMT on the relationship. Many of the conclusions suggested by O'Farrell *et al.* (1998) could have been further assessed had the authors measured EE levels following patient adherence with Antabuse or couple engagement with BMT. Such analysis could have further determined the impact that BMT and EE have on family relationships in alcohol problems. The primary outcome measure for this study was relapse; however, the study also demonstrated high levels of hostility and criticism amongst spouses of alcoholic patients. As EE is transactional in nature and clearly has an impact on the person with the alcohol problem, an aim of this study is

to focus on the relationship between levels of EE and the general mental health outcomes for the family members concerned.

1.4.2. Coping skills

A study by Goossens *et al.* (2008) found that caregivers of people with bi-polar disorder reported higher levels of distress when the patient they cared for experienced more consequences of their disorder. Distress was also found to be higher in caregivers who were passive (feeling overwhelmed by the problem) and utilised more avoidant coping styles (running away from the problem or leaving it to run its course); these coping styles were assessed using the Utrecht Coping List (UCL; Schreurs, *et al.,* 1993), which is a self-report measure used to assess how people cope with problems. Parks and Pilisuk (1991) found that the coping responses of those in a caregiving role are dependent on a variety of factors, including the level of disability of the individual being cared for, personality factors, and social support. How the disability is perceived and how the caregiver relates to the individual with the disability are all pertinent considerations when quantifying coping responses. Orford *et al.* (2005) made a commentary regarding the special circumstances around social support for family members of people with substance misuse problems. They posited that whilst family members of people with substance misuse problems have positive gains from social support, they prefer the support to be similar in nature to their own coping style. They also appreciate support from those who are also supportive of the individual with the problem. They stated that this differs in nature from other stressed family groups.

1.4.2.1. *Stress-Coping-Health Model*

The stress-coping-health model was first described by Orford *et al.* (1992) and states that relatives of people with drug problems (including alcohol) are more likely to experience physical and psychological ill health as a result of exposure to increased stress levels on a daily basis. The model accounts also for the interaction between coping and health and also coping and the course of the alcohol or drug problem.

Orford *et al.* (1992) defined "coping" as any actions, feelings, or thoughts that a relative may have in response to the drinking or drug use of another. The authors carried out qualitative research to determine different typologies of coping amongst family members of people with substance misuse problems. Early research into family dynamics and substance misuse suggested that drug and alcohol problems could be largely influenced by personality deficiencies of close relatives (Whalen, 1953). However, Orford *et al.* (1992) proposed that alcohol and drug problems within a family lead to higher levels of stress for family members, which can lead to problematic family dynamics. This model does not suggest causation of the drug or alcohol problem, but instead suggests a number of different factors that may play a role in maintaining problematic substance misuse. The authors suggest that a bio-psycho-social perspective should be taken when determining the origin of a substance misuse problem, adding however that the coping responses of family members are transactional in nature and so may influence the subsequent course of the problem. The authors of this paper interviewed 40 family members of people with substance misuse problems and identified eight different typologies of coping: emotional, inactive, avoiding, tolerant, supportive of user, controlling, confrontative, and independent.

"Emotional coping" describes those relatives who have regular conflicts with the substance abuser and views him/her as not being trustworthy or reliable; it is reflexive in nature and does not involve much planning or strategising by the relative. Inactive coping refers to those relatives who are too fearful to take action against the user or who may feel too hopeless about the situation. Those who cope in an inactive manner may not feel any responsibility regarding the substance misuse of another. "Avoidant coping" involves escaping from the source of the stress. "Tolerant coping" by a relative of a substance abuser means that the relative may give into the wishes of the user by being protective and accommodating. The motivation for this type of coping by the relative is often the quest for a quiet life (Orford *et al.,* 1992). As the name may suggest, "control" as a coping mechanism involves attempts to control the substance misuse of another, for example, by setting limits or by remaining with the user at all times to monitor his or her actions. "Support for the user" is a type of coping defined by providing useful help to the user when they need it. "Confrontative coping" is coping where the relative communicates clearly his/her own views and standpoints regarding the substance misuse. Finally, "independent coping" involves a shift in the relative where he/she has become more independent of the substance abuser, and seeks support from other sources in the hope of increasing his/her own strength in the face of substance misuse.

Orford *et al.* (1992) concluded that although this research was explorative in nature it highlighted that coping responses cannot be separated from the emotions and cognitions of the individual, and secondly that relatives rarely fit into one coping typology. They also concluded that the majority of reports from relatives included a

variety of differing coping responses across different situations associated with the problem of alcohol or substance misuse.

Further analysis of the factors associated with coping which were previously proposed suggested that coping could best be described in terms of three factors: engaged, tolerant-inactive, and withdrawal (Orford *et al.,* 1998). According to Hurcom *et al.* (1999), engaged coping encompasses the domains of "assertive", "supportive", "controlling", and "emotional" coping. Tolerant-inactive coping comprises "self-sacrifice", "acceptance", and "inactive" strategies. Withdrawal coping comprises "independent" and "avoidant" coping strategies. The term "avoidant" has been used by a variety of authors when describing coping strategies (Goossens *et al.,* 2008; Lutzy and Knight, 1994; Moos, Finney, *et al.,* 1990). It is noteworthy that this term has been used by the aforementioned authors to denote a maladaptive coping strategy, which comprises running away from the problem or avoiding confrontation. In the context of withdrawal coping as defined by Orford and colleagues (1998) "avoidance" is seen as an adaptive strategy and refers to an active decision by the caregiver to put distance between him/herself and the person with the problem. It denotes deliberate and controlled actions by the caregiver, as opposed to the more reactive and arguably less controlled strategies described by Goossens *et al.* (2008), Lutzy and Knight (1994), and Moos, Finney, *et al.* (1990).

In a more recent study, Orford *et al.* (2005) found that tolerant-inactive coping was consistently correlated with higher scores on the Symptom Rating Test (SRT; Kellner & Sheffield, 1973), which measures physical and psychological symptoms. Similarly, a significant correlation was found between engaged coping and elevated scores on

the SRT. There were no correlations found between withdrawal coping and SRT scores. Howells and Orford (2006) found that family members who score highly on tolerant-inactive coping respond quickly to coping interventions. Those family members who used engaged coping were also found to respond to interventions, albeit at a slower rate than tolerant-inactive coping. With regards to the impact that coping styles have on the person with the alcohol problem, Barber and Crisp (1995) reported that controlling and nagging styles are the least effective styles to use when trying to encourage a person to change their drinking behaviour. Equally, protecting the person with the problem or attempting to pacify the situation is also of little benefit when attempting to elicit change (Barber & Crisp, 1995). The strategies described by Barber and Crisp (1995) are similar to the aforementioned features of engaged coping and tolerant-inactive coping, suggesting that these strategies neither have benefits for the caregiver nor the person with the problem.

Orford *et al.* (2001) carried out a study to identify cross-cultural differences in coping mechanisms in families where one person has an alcohol or drug misuse problem. Orford *et al.* (2001) set out to test the stress-coping-health model in differing socio-cultural regions as they proposed that previous literature on the influence of alcohol on the family has failed to take into account the role of society and culture. The study compared families in Mexico City with families in South West England. The authors predicted that families in Mexico City would report higher levels of tolerant-inactive coping whereas families in SW England would report higher withdrawal coping. The second half of this hypothesis was supported. There was no difference found between the groups with regards to use of tolerant-inactive coping. The study also found that a family climate that was high in conflict and lacking in harmony was indicative of

higher symptom scores for relatives thus providing support for the stress-coping-health model. Both tolerant-inactive coping and also engaged coping were associated more with female spouses than with other caregivers. From this the authors concluded that female spouses of male drinkers and substance abusers were more vulnerable to physical and mental health problems. With regards to withdrawal coping, the study found that a subgroup of male partners of female drinkers in England were more likely to use withdrawal as a coping mechanism when compared to females. A prevalence of withdrawal coping for both cultural samples in the study had a significant negative correlation with symptoms as measured by the SRT. The authors also found differences in withdrawal within the sexes; husbands were more likely to report withdrawal than were father caregivers; these groups were defined separately. They concluded that withdrawal is not related to gender, and may be more related to the nature of the relationship and the severity of the substance misuse. The sample chosen for this study represented an opportunistic collaboration between researchers in different cultures, and the authors reported that whilst the differences between the cultures formed the basis for the hypotheses of the study, it was likely that there existed many confounding variables between the comparison groups. Orford *et al.* (2001) also failed to report on the treatment status of the alcohol or substance misusers in the study. Participants were recruited from a variety of sources, including public advertising. The authors did not report using any measure to verify the degree of alcohol or substance misuse which was a primary concern of the study. The inclusion criteria of the current study state that the participant must be a caregiver to a patient of a specified NHS specialist alcohol service, in this way ensuring that the alcohol use referred to in this study is recognised within specialist services as a problem.

A study by Hurcom *et al.* (1999) explored the predictive validity of a variety of environmental and cognitive factors in determining the coping styles of female partners of male drinkers. The study looked at the duration for which the female partner had been coping with the problem, the degree of hardship experienced, the amount of support available to the female, and the self efficacy and self demands beliefs held by the female. Self efficacy beliefs relate to the belief that one can successfully carry out the behaviours which are required to achieve the desired outcomes (Bandura, 1977). Self demand beliefs are associated with being absolutist and generating statements which include, for example, the words "must" and "ought" (Ellis, 1962). The outcome variables used in the study were the three identified coping responses: engaged, tolerant-inactive, and withdrawal. Hurcom *et al.* (1999) also investigated the link between the predictor variables mentioned above and the outcome for females on a measure of psychological well-being, the SRT (Kellner & Sheffield, 1973). The authors hypothesised that a significant predictive relationship would be found between the predictor variables and coping style and the predictor variables and psychological well-being outcome. Twenty-nine females completed the measures used in the study (Hurcom *et al.*, 1999). Using regression analysis, the study found that engaged coping was best predicted by self demands for engagement. The use of multiple regression analysis with such a small sample size and a high number of predictors is questionable within this study. Green (1991) states that the minimum sample size for regression analysis where the aim is to test individual predictors is 104 + k, where k represents the number of predictors. Hurcom *et al.* (1999) had a sample size of 29 with 10 predictor variables, thus falling far short of the recommended

minimum. For this reason the results of the regression analysis in this study should be viewed cautiously.

In the case of tolerant and withdrawal coping, these variables were predicted by a combination of environmental and cognitive variables (e.g. hardship, duration of the alcohol problem, self efficacy, and self demand beliefs). The authors also found that psychological well-being was best predicted by the level of hardship experienced by the female. There was no predictive power between cognitive factors and psychological well-being, as measured by the Symptom Rating Test (SRT; Kellner & Sheffield, 1973). Hurcom *et al.* (1999) proposed that further research should be conducted in this area to determine possible predictors of psychological well-being in female partners of male drinkers. The study also found a relationship between duration of coping and withdrawal coping strategies; women who had been living with the excessive drinking of another for longer were more likely to use withdrawal coping than other women. The small sample size reduces the extent to which reliable conclusions can be drawn from Hurcom and colleagues (1999) research. The study only looked at female partners of male drinkers and did not include other family members who could equally experience the negative consequences of the drinking behaviours. Hurcom *et al.* (1999) failed to report where the sample of females was recruited from and also whether or not the person with the alcohol problem was engaged in treatment for the problem. The current study aims to address these deficiencies by examining the coping responses of a variety of family members and also other possible influencing factors on the psychological well-being of family members of people with alcohol problems.

Philpott and Christie (2008) carried out a study examining the coping strategies of male partners of female drinkers, as much of the previous work in this area has focused predominantly on female partners (Halford *et al.,* 2001; Hurcom *et al.*, 1999;). The authors found that the male participants in this study utilised more than one coping strategy as measured by The Coping Questionnaire (Orford, 1996). Males reported using engaged coping most frequently, and withdrawal coping strategies were reported least frequently, contrary to what the authors had hypothesised. The authors reported that this was contrary to the findings of Orford *et al.* (2001). However, on examination, it appears that across the sample studied, Orford *et al.* (2001) also found that males reported using more engaged coping and less withdrawal coping. Orford *et al.* (2001) found that male spouses of female drinkers reported more withdrawal coping when compared with female partners of male drinkers. However the study did not specify that males reported using more withdrawal coping than engaged coping. Philpott and Christie (2008) reported that the high level of engaged coping reported may have been found because participants were recruited through alcohol services, the implication being that those family members of people with an alcohol problem who are receiving treatment may be more likely than other family members to use engaged coping. Philpott and Christie (2008) also found a positive relationship between the duration of problem drinking and the use of tolerant-inactive coping strategies. The authors had expected to find a relationship between withdrawal coping and duration of problem drinking in light of the findings of Hurcom *et al.* (1999) but proposed that because the problem drinkers in this study were engaged in treatment, spouses were utilising less withdrawal strategies at the time of participation in the study. Since Hurcom *et al.* (1999) did not report on the treatment status of the

drinkers in the study, this conclusion reached by Philpott and Christie (2008) is not conclusive.

1.4.3. Causal Attributions

Weiner (1995) stated that the way in which relatives react to an ill family member could be influenced by the degree to which the relative perceives that the illness is controllable by the patient. More specifically he postulated that the relatives' perceptions are related to their beliefs regarding the patients' ability to control the causes of behaviour. According to Weiner's attribution-emotion model (Figure 1.1), if the relative believes that the causes of the illness are controllable by the patient then this is more likely to elicit an anger response from the relative, resulting in the relative offering no help to the patient. Conversely if the relative believes that the causes of symptoms are not under the control of the patient then more sympathetic reactions are evoked and the relative is more likely to provide support. Based on this model of attribution-emotion, it is possible that there may be a relationship between a relative's beliefs regarding the cause and controllability of the illness and his/her own level of expressed emotion. Since high levels of expressed emotion involve high levels of criticism and hostility, these constructs could be reflective of the anger response outlined in Weiner's theory.

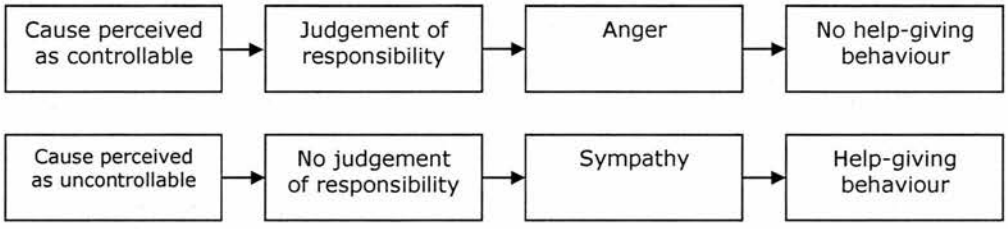


Figure 1.1.: Weiner's attribution-emotion model (from Niv *et al.*, 2007)

Niv *et al.* (2007) carried out a study to determine the role of substance misuse in the attributions made by relatives with regard to the mental illness of a family member. As Weiner's theory does not reflect substance misuse, this study sought to determine whether relative's attitudes and perceptions regarding substance misuse would influence their attitudes and perceptions of mental illness. To do this the study compared two groups: those patients with mental illness alone and those with a dual diagnosis of mental illness and substance misuse. The study found that relatives of people with substance misuse problems attributed greater controllability to the patient's symptoms than did relatives of people without a substance misuse problem. Symptoms in this study referred to "problem behaviours associated with mental illness" (Niv *et al.,* 2007, p. 309). These relatives also were more likely to believe that the symptoms were the responsibility of the patient. On measures of affect, the authors found that relatives of patients with substance misuse problems displayed more negative affect towards the patient than did relatives of those without a substance misuse problem. There was also a positive correlation found between the severity of the substance misuse problem and the attributions for responsibility and controllability. With regards to Weiner's attribution-emotion model, the study found that the model was upheld for substance misuse, i.e. increased attributions of

controllability were associated with increased attributions of responsibility and negative affect. Whilst this study demonstrated, to a degree, the importance of attributions on the affective reactions of family members towards a person with a co-morbid substance misuse and mental health problem, it would have been interesting if the study had also assessed the causal dimensions of locus of control and stability, which are also central to Weiner's Attribution Theory (1980). It could be argued that in the area of substance misuse (including alcohol problems), the dimensions of locus of control and stability would be equally influential on the affective reactions of family members as the dimension of controllability. The current study will examine the attributions of caregivers with regard to the causes of alcohol problems in terms of locus of causality, stability, and controllability.

Barrowclough *et al.* (2005) carried out a similar study to that conducted by Niv *et al.* (2007). Barrowcough *et al.* (2005) highlighted that problematic dynamics within households with a mentally ill or substance abusing patient can have a negative impact on the well being of the family members, and may impact on their ability to provide the necessary support that the patient requires. The study compared the attributions and EE levels of family members of patients with schizophrenia and those of patients with comorbid schizophrenia and substance abuse problems. The authors found that although there was no difference between relatives with regard to overall EE scores, they reported that family members of patients with comorbid substance misuse problems were more hostile and rejecting of the patient. Relatives also tended to make more controllable, personal, and internal attributions with regards to the patient's problems when there was a comorbid substance misuse problem. These findings for controllability and personal attributions remained steadfast when the

analysis was restricted to High-EE relatives only. Although the study looked at both alcohol and illicit drug use, the authors found no significant difference between EE levels and attributions for alcohol use in comparison to drug use, although drug use was associated with fewer positive comments and amphetamine use in particular was also related to more critical comments and controllable attributions (Barrowclough *et al.*, 2005). In relation to the levels of hostility and rejection recorded amongst the comorbid substance misuse relatives group, Barrowclough *et al.* (2005) suggest that it is this factor that primarily leads to family break down and more serious relationship problems within the family.

According to Hooley (1985) there is a link between attributions made about problem symptoms of illness and the levels of criticism displayed by a relative towards a patient. She suggested that relatives are more critical when they believe that patients' are in control of their symptoms or problems. Hooley suggested that there were certain patient behaviours that were more likely to incite criticism from relatives: undesirable behaviour and behaviour that could potentially be changed by the patient, e.g. self neglect and impulse control problems. Hooley *et al.* (1987) carried out research to test this theory. They predicted that symptoms which were viewed as controllable by the patient would be more prevalent in distressed marriages than in non-distressed marriages, where one spouse experienced mental illness. The results demonstrated that problems which were viewed as impulse control problems, e.g. drinking and gambling, were associated with higher levels of marital dissatisfaction and family tension.

Further evidence for negative causal attributions towards alcohol problems are described by Weiner (1980). In this paper he described a study carried out by Piliavin *et al.* (1969), where the help-giving reactions of passers-by were recorded following the witnessing of a confederate, i.e. an accomplice to the study, falling over. In one condition, the confederate appeared to be ill and was walking with a stick and in the second condition he appeared drunk. The results of this study demonstrated that the attributions of passers-by were more sympathetic and pitying in the instance of the "ill" confederate, and more disgusted and angry towards the "drunken" confederate. From this experiment it was concluded that prior to a caring response (or neglectful response) individuals first appraise a situation to evaluate the probable cause. Weiner concluded that causal ascriptions are only weakly related to the amount of help or support that is given, but they are more closely related to an individual's affective reaction to the situation (Weiner, 1980).

A study carried out by Maisto *et al.* (1988) raised a number of interesting considerations for mental health professionals working in the area of alcohol problems. This study examined the attributions made by couples about a relapse to drinking by the drinking spouse. The couples participated in semi-structured interviews to ascertain the perceived reasons for relapse. These included: interpersonal involving the spouse, interpersonal involving another family member/other person, or noninterpersonal, specific events that may have led to a relapse. The study concluded that marital couples do not concur on the attributions they have about relapse, and secondly that the alcoholic patient attributes the causes of relapse to the spouse more frequently than does the spouse. The authors concluded that this study highlights key points for clinical practice. The first of these is that since

there is such little concordance between marital couples relating to important events in the patients progress, clinicians need to be mindful of the spouse's perception and record of events. Secondly they concluded that such differing perceptions of an alcoholic relapse could influence greatly the nature of the relationship between the couple, leading to discord, which could act as a further trigger for relapse.

The focus of the present research is not on the relapse rates of the drinking family member, but on the dynamics of the relationship between the person with the alcohol problem and a close family member. The study mentioned above illustrates well the differing factors that can influence relapse and highlights that the role of others cannot be ignored in clinical practice, particularly when a relationship is discordant due to an alcohol problem. The discordant relationship that may exist between a person with an alcohol problem and a close family member is also clinically important due to the impact that carer burden and the stress of an alcohol problem can have on that family member.

1.4.4. Gender Differences

A meta-analysis focusing on gender differences in caregiving, found that across the range of studies carried out, female caregivers experience more burden than male caregivers (Miller & Cafasso, 1992). Parks and Pilisuk (1991) examined the differences between male and female carergivers with regards to mental health and coping styles. They concluded that women are more likely to use fantasy as a coping mechanism in times of caregiver stress; however this coping strategy was also found to be predictive of anxiety amongst this population. "Fantasy" was described as an emotional coping style, which consisted of a "sense of helplessness and a wish for

greater personal power and for miraculous changes in prognosis or in history" (Parks & Pilisuk, 1991, p.505). Men were found to use a withdrawal coping mechanism in the caregiving role. In this study withdrawal coping was defined as adopting a "business as usual" approach and an unwillingness to discuss the problem situation with others (Parks & Pililsuk 1991). Although the levels of anxiety were found to be higher amongst female caregivers, levels of depression were found to be equal amongst the genders; however younger male caregivers were more likely to report feeling depressed than older males and females. An interesting finding in this study was that a consistent predictor of stress, in caregiving females, along with fantasy as a coping style, was having an external locus of control, i.e. feeling that the events that were occurring were not within their control. Turner and Avison (1989) suggested that higher levels of distress amongst females may be due to their vulnerability to experience the stress of other people in their lives, whereas males tend to be vulnerable to their own and not others' stress.

Pinquart and Sorenson (2003), in their review of caregivers of elderly people with and without dementia found that caregivers do less well in the domains of self-efficacy, depression, and stress than non-caregivers and that these findings were more prevalent for female caregivers rather than male. The authors had predicted that female caregivers would have greater psychological distress than male caregivers on the basis of a number of factors. These factors include: being more likely to take up the role of primary caregiver with a male as the secondary caregiver, being less likely to obtain assistance, being more likely to accept the caregiver role due to social pressure rather than as a free choice, being more likely to stay within the role, even when it becomes

very stressful, and tending to have poorer coping resources (Pinquart & Sorenson, 2003).

Lutzy and Knight (1994) examined further the differences in male and female caregiver distress in order to determine factors which led to the reported differences in the caregiver's experience. This study put forward two possible hypotheses to explain the differences: men are less attentive to their emotional states and so report distress less frequently, and women have been socialised into utilising less effective coping mechanisms for lessening levels of distress. The findings suggested that gender differences in caregiver distress can be attributed to differential coping styles; however they can also be attributed to exaggeration in self-report measures of distress. The authors suggested that male and female caregivers may experience the same levels of distress; however males may be less likely to report this. This study found that the use of escape-avoidance coping styles separated the genders in terms of caregiver distress; Lutzy and Knight (1994) found that this coping mechanism was more likely to be used by females. This finding, along with that of the previous study, highlights the presence of a relationship between coping style, gender, and level of distress in different caregiver groups. This study aims to examine these relationships, specifically for caregivers of people with alcohol problems.

Navaie-Waliser *et al.* (2002) carried out a study looking at the differences between male and female informal caregivers with regard to a variety of factors including coping mechanisms, emotional wellbeing, and physical wellbeing. The authors used logistic regressions to determine whether gender acted as a predictor of a variety of variables. The results of the study indicated that there exist significant differences

between male and female caregivers in the areas of emotional wellbeing, coping mechanisms and challenges in care provision. Being a female caregiver was found to be predictive of having difficulties with the care provision task and of perceiving that the needs of the task are not being met. This analysis also revealed that female caregivers are more likely to cope by foregoing other pleasurable activities, and familial and employment obligations. The authors concluded that this could lead to an increase in poor mental health and social isolation. Furthermore a decrease in employment for female caregivers could also lead to increased financial burden on the family and thus increasing the level of potential stressors in a household. Although this study had a large sample size (1002) the analysis did not differentiate between those providing unpaid care themselves and those family members who paid for care; both groups were considered a homogenous group of informal caregivers. It could be argued that the experiences of unpaid caregivers would differ considerably from those who were paying someone else to care for their ill family member or friend. The study also failed to clarify the measurements used to assess the emotional well-being of the caregiver and also the physical well-being of the caregiver, making it difficult for the study to be replicated or the findings generalised.

Goossens *et al.* (2008) looked at coping responses of caregivers of patient's with bi-polar disorder and found that males were more likely to use an avoidant coping style and more distracting activities than general population males. They also found that female caregivers tended to seek out less social support and used less active coping responses than females in the general population. The authors recommended that clinicians should be mindful of caregiver distress and offer support where it is evident, either in the form of support groups or psycho-education.

The findings across gender difference studies in caregiving have all generally found that females fare less well than males with regard to the coping styles they adopt but also in terms of mental health outcomes. However the studies described used varying comparison groups and differed in terms of the illnesses studied and the measures used. When considering mental health outcomes for caregivers, the majority of the studies discussed found that females have poorer mental health outcomes in the domains of anxiety (Parks & Pilisuk, 1991), depression (Pinquart & Sorenson, 2003), and general mental health (Navaie-Waliser *et al.*, 2002; Orford *et al.*, 2001). Miller and Cafasso (1992) also reported that females were generally more burdened than males. With regard to the differences in coping strategies used, again, a variety of outcome measures were used so it is therefore difficult to make comparisons across studies, except to say that the majority of studies reported that females and males use different coping styles (Navaie-Waliser *et al.*, 2002; Orford *et al.*, 2001; Parks & Pilisuk, 1991).

1.5. Family based alcohol interventions

The burgeoning research literature on alcohol problems, relapse, and treatment repeatedly suggests that a focus on social networks and family involvement offers the best evidence for treatment (Miller & Willbourne, 2002). The NICE (National Institute for Clinical Excellence) guidelines on the use of psychosocial interventions for drug misuse (NICE, 2007) recommend interventions such as Community Reinforcement, Behavioural Couples Therapy, and Network Therapy. The SIGN guidelines on "The management of harmful drinking and alcohol dependence in primary care" (SIGN, 2003) also recommended the use of Community Reinforcement

and Family Training (CRAFT; Meyers *et al.,* 1998) in the treatment of alcohol dependence. Involving families in treatment of addiction problems has the potential for a good outcome in a number of ways. Orford *et al.* (1976) reported that having spousal support during treatment for alcohol problems is an important factor in reducing rates of remission. Involvement of family members can lead to an increase in the uptake of services by people with alcohol/drug problems.

Miller *et al.* (1999) compared three different intervention strategies for engaging those with alcohol problems in treatment through family members. The study compared Community Reinforcement Approach and Family Training (CRAFT), Al-Anon facilitation therapy, and Unilateral Family Therapy. The outcome measure for each intervention type was engagement in treatment by the person with alcohol problem. The study examined levels of depression, anger, family cohesion and conflict, and relationship status at different intervals during the intervention, and found that improvement in all these domains was similar for participants, regardless of the intervention. The study also reported that the CRAFT method was the most effective for engaging unmotivated people with alcohol problems in treatment. They concluded that because CRAFT empowers family members and carers, it allows them to feel that they can regain control over situations within a household.

Copello and Orford (2002) highlighted the importance of including family members and social networks in treatment plans for addictions. In their editorial piece for *Addictions* (2002) they emphasised that research evidence suggests that treatments for addictions which incorporate a social element are more efficacious (Miller & Wilbourne, 2002). Copello and Orford (2002) went on to argue that involving families

and social support networks in treatment leads to a reduction in the level of harm experienced by the family caused by addiction. Copello and Orford (2002) also suggested that family focused work in addictions should encompass the experiences of all the members of the affected family, and that treatment outcomes should evaluate the functioning of the family in total and not just the functioning of the person with the addiction.

Treatment of alcohol problems that involves the family member or larger social network tends to focus primarily on the individual with the alcohol problem, and as previously mentioned, outcomes are measured in terms of abstinence or relapse rates. Copello, Orford, *et al.* (2000) described a treatment that focused solely on the needs of the family member. The treatment was based on Orford *et al.* (1992) stress-coping-health model and involved five steps which included exploring the concerns of the family, providing information, coping, social support, and the discussion of specialist help where appropriate. This approach constituted an attempt to address the stress and psychological problems experienced by families of those with alcohol problems in their own right. Although other treatment approaches which involve a family member or members in the treatment of alcohol problems can have residual benefits for the family member, the main focus remains on the drinker. The work of Copello, Orford, *et al.* (2000) highlights the need for family members to receive treatment for the problems they experience as a result of another person's addiction. Copello, Templeton, *et al.* (2000) carried out an evaluation of the treatment package previously described. The authors hypothesised that the intervention would lead to an increase in the level of withdrawal coping reported by family members and a decrease in tolerant-inactive or engaged coping. The study involved 38 relatives of people with alcohol

problems, of whom, 27 completed the follow-up questionnaires. The authors found that following the intervention, overall coping scores, as measured using The Coping Questionnaire (Orford, 1996), had reduced significantly, although when taken individually there had been a non-significant increase in withdrawal coping and a significant decrease in both tolerant-inactive and engaged coping. The rates of physical and psychological symptoms were also significantly reduced following intervention. The authors highlighted that the study did not involve a control group, so it is not possible to determine whether the results were as a result of the intervention or other factors (Copello, Templeton, *et al.,* 2000).

1.6. Aims

As highlighted above, mental health research has repeatedly demonstrated the impact that caring for a mentally ill family member can have on the coping responses, expressed emotion, mental health, and attributions of the caregiver (e.g., Barrowclough *et al.*, 2005; Goossens *et al.*, 2008; Orford *et al.,* 2001; Parks & Pilisuk, 2001). In a research environment where the focus is gradually shifting towards acknowledging and treating the psychological problems experienced by family members of people with alcohol problems (Copello, Orford *et al.*, 2000; Copello, Templeton, *et al.*, 2000) it is important to determine where interventions for family members should focus.

The previous work of Copello, Templeton, *et al.* (2000) demonstrated that teaching family members about alternate coping strategies in the face of alcohol problems can be effective in reducing scores on a mental health outcome measure. Orford *et al.* (2001) reported that females are more likely to use engaged and tolerant-inactive

coping strategies and that males are more likely to use withdrawal coping strategies. Should a similar pattern of coping strategies between the genders be found in the current study, it is likely that mental health outcomes for males and females in the current sample may differ also. This is on account of the fact that tolerant-inactive and engaged coping has been found to be associated with poorer mental health outcomes than withdrawal coping (Orford *et al.,* 2001). The current study also aims to examine further the finding of Parks and Pilisuk (1991) who reported a relationship between higher levels of stress and having an external locus of control for female caregivers. This study hopes to determine whether female caregivers are more likely than male caregivers to attribute an external locus of control to the drinking behaviour of the person being cared for.

Those studies that have examined factors which influence the caregiving relationship in the field of addictions, for example expressed emotion (Fichter *et al.,* 1997; O'Farrell *et al.,* 1998), and attributions (Barrowclough *et al.*, 2005; Niv *et al.*, 2007) either failed to examine the mental health outcomes for family members or focused solely on treatment engagement and relapse of the person with the alcohol problem as the outcome measures. An aim of this study is to examine whether high expressed emotion is more prevalent amongst female caregivers than males. Previous research into gender differences in caregiving has suggested possible reasons for differences in mental health and coping between male and female caregivers (Goossens *et al.*, 2008; Miller & Cafasso, 1992; Parks & Pilisuk, 1991). It is possible that the high levels of criticism and hostility associated with high expressed emotion could also impact on the mental health outcomes and coping strategies of caregivers. Since female

caregivers fare less well in these domains than male caregivers it is suggested that they may have higher levels of expressed emotion.

Another aim of this study is to examine the relationship between coping skills, expressed emotion, attributions, and mental health outcomes for family members living with a person who is receiving treatment for an alcohol problem. It is hoped that determining which factors are most prevalent for family members will lead to interventions tailored accordingly to address the specific needs of caregivers of people with alcohol problems.

In light of the differences that are evident in the coping strategies and mental health outcomes of male and female carers of people with other illnesses (Navaie-Waliser *et al.,* 2002; Parks & Pilisuk, 1991; Pinquart & Sorenson, 2003), a primary aim of this research is also to examine whether gender plays a role in determining the coping, expressed emotion, and causal attributions, and mental health outcomes of family members of people with alcohol problems. Orford *et al.* (2001) reported gender differences in coping strategies of families of people with alcohol and drug problems; however that was not the primary aim of that research. Hurcom *et al.* (1999) examined the coping strategies of female partners of male drinkers and Philpott and Christie (2008) focused solely on the male partners of female drinkers. The current study allows for direct comparisons to be made between male and female family members of people with alcohol problems; the analysis will include an examination of coping strategies and mental health. In addition, the impact of expressed emotion and attributions on caregivers of people with alcohol problems will also be explored.

1.6.1. Research questions

1. Do gender differences exist in the coping responses, expressed emotion, causal attributions, and mental health outcomes of caregiver's of people with alcohol problems?
2. Does a relationship exist between mental health outcomes of caregivers of people with alcohol problems and their coping responses, expressed emotion, and causal attributions?

1.6.2. Main Hypotheses

Hypothesis 1

Female caregivers will report using more engaged and tolerant-inactive coping strategies than male caregivers. Male caregivers will report using more withdrawal coping strategies than females.

Hypothesis 2

Female caregivers will have higher scores on a measure of expressed emotion (The Family Attitude Scale; FAS) and on a measure of mental ill health (The General Health Questionnaire; GHQ-12) than male caregivers.

Hypothesis 3

Female caregivers will make more external attributions regarding the causes of the alcohol problem of a family member than male caregivers.

1.6.3. Secondary Hypotheses

Hypothesis 4

Participants would report using more predominantly engaged coping strategies, followed by tolerant-inactive coping and then withdrawal coping.

Hypothesis 5

Participants will make more internal and controllable as opposed to external and uncontrollable attributions relating to the cause of the alcohol problem of a family member.

Hypothesis 6

High engaged coping and high tolerant-inactive coping, as well as internal, controllable, and stable attributions will be associated with higher scores on the GHQ-12 and the FAS. High withdrawal coping will be associate with lower GHQ-12 scores.

2. METHODOLOGY

2.1. Design

The aim of the study is to examine the differences between male and female carers of people with alcohol problems on the following domains: expressed emotion, causal attributions, mental health, and coping styles. A cross-sectional questionnaire design was used with family members of patients of a specialist alcohol problems service. The participants represented an independent sample. Data collection focused on the recent events in their environment. An a-priori power analysis conducted using G Power specified 35 participants per group in order to achieve a large effect size (.80) using independent samples t-tests (Erdfelder *et al.,* 1996).

2.2. Participants

Participants were made up of family members or partners of patients of a specialist alcohol service. Participants included parents, partners/spouses, children, and siblings. Inclusion criteria included the following:

1. Alcohol problem: The person with the alcohol problem had to be currently under assessment or receiving treatment at the specialist alcohol problems service. Since the study was concerned with the perceptions of the participants regarding alcohol use, participants were also asked to state, in years and months, how long they felt their family member had experienced a problem with alcohol.
2. Active problem: The alcohol problem had to be current as opposed to historic. The family member concerned had to have been dealing with an active alcohol problem of another person within the previous 3 months.

3. Living arrangements: Family members must be living with the person with the alcohol problem.

Family members who were also being seen by the service for their own alcohol problem were excluded from the study.

2.2.1. *Demographics*

Participants were recruited from one NHS specialist alcohol service and also from one non-statutory service. It had been planned originally to recruit all participants from the NHS specialist alcohol service, however due to difficulties in recruiting sufficient numbers from the NHS service, ethical permission was sought to collect data from members of a support group for family members of people with alcohol problems run jointly by the NHS specialist alcohol service and the non-statutory service. The inclusion criteria stated that the participant had to have a family member who was currently a patient of the NHS specialist alcohol service; for this reason, those participants recruited from the NHS service and those recruited from the joint NHS and non-statutory support group were treated as one sample. Since the decision to recruit participants from the non-statutory service had happened once data collection had already begun at the NHS specialist alcohol service, the demographic information collected does not include specific questions relating to the recruitment pathway. The principal researcher took note of the location of recruitment, but no other discerning information was collected.

During the data collection period a total of 96 potential participants were approached, either directly (by principal researcher or CPN) or indirectly (through the patient), in

both the NHS specialist alcohol service and the non-statutory service. From this number, 55 family members of patients seen by the specialist alcohol problems service were recruited and completed the study. The remaining 41 potential participants approached did not consent to participate.

2.2.2. *Participant Demographics*

The total number of participants was 55; comprising 35 females (63.6%) and 20 males (36.4%). A large proportion of participants in both the male and female groups were over the age of 65 (30.9%). Twenty-three of the participants were parents of the person with the alcohol problem (41.8%), 17 were partners (30.9%), 9 were siblings (16.4%) and 6 were adult children of the person with the alcohol problem (10.9%). With regard to employment status of the participants, 23 were retired (41.8%), 14 were in full-time employment (25.5%), 9 were employed part-time (16.4%), 6 were full-time carers of children (10.9%), and 3 were unemployed (5.5%). Twenty-eight participants were recruited through the NHS specialist alcohol service (50.9%) and 27 were recruited through the non-statutory service (49.1%). Table 3.1 provides a summary of the demographic information for both participant groups separately.

Table 2.1. Percentages showing the age range, relationship to drinker, and employment status (Frequencies in brackets) of male and female participants

Demographics	Male	Female
Age Ranges		
18-24	5% (1)	2.9% (1)
25-34	0 (0)	5.7% (2)
35-44	25% (5)	28.6% (10)
45-54	15% (3)	8.6% (3)
55-64	20% (4)	25.7% (9)
>65	35% (7)	28.6% (10)
Relationship to drinker		
Parent	45% (9)	40% (14)
Spouse/Partner	30% (6)	31.4% (11)
Sibling	10% (2)	20% (7)
Child	15% (3)	8.6% (3)
Employment status		
Full-time employed	30% (6)	22.9% (6)
Part-time employed	20% (4)	14.3% (5)
Unemployed	0	8.6% (3)
Full-time carer	5% (1)	14.3% (5)
Retired	45% (9)	40% (14)

2.2.3. *Problem drinker demographics*

Participants in the study also reported on the demographic features of the family member with the alcohol problem. Thirty-five of the patients were male (63.6%) and 20 were female (36.4%). The majority of the patients, twenty-one, were aged between 35-44 (38.2%), 5 were aged over 65 years (9.1%), 9 were in the 55-64 age range (16.4%), 13 were aged between 45-54 (23.6%), 6 were in the 25-34 age range (10.9%), and one patient was aged between 18-24 years (1.8%). Thirty of the patients were unemployed (54.5%), 14 were in full-time employment (25.5%), 5 were employed part-time (9.1%), 5 were retired (9.1%), and one was a full-time carer (1.8%).

2.3. Location of Recruitment

2.3.1. ***NHS specialist alcohol service***: Participants were recruited at two different points: outpatient psychiatry appointments and Community Psychiatric Nurse (CPN) outpatient appointments.

2.3.2. ***Non-Statutory Service***: Participants were recruited through a group for family members of people with alcohol problems run jointly by the specialist alcohol service and the non-statutory service. The group took place at an NHS site. Only those group members whose family members were engaged with the specialist alcohol service were included in the study.

2.4. Measures

2.4.1. *The General Health Questionnaire – 12 (GHQ-12)*

The General Health Questionnaire (Goldberg, 1972; Appendix A) is used widely as an indicator of minor mental health disorders. Goldberg and Williams (1988) demonstrated that the GHQ-12 has relatively good validity, and so it has become one of the most popular forms of the General Health Questionnaire. A series of studies have repeatedly demonstrated that the GHQ-12 comprises three separate factors: social dysfunction, loss of confidence, and anxiety/depression (e.g. French & Tait, 2004; Graetz, 1991; Mäkikangas, *et al.,* 2006). Mäkikangas *et al.* (2006) also demonstrated that the scale has good construct validity as the factor loadings remained stable over two different testing periods. The authors stress however, that the GHQ-12 is not a measure of long term psychiatric disorders, it measures current disorders. The scale comprises 12 questions relating to respondent's well being over

the preceding month. Respondents have 4 response choices, which ask them to compare their current functioning to how they normally feel. The responses range from "better than usual", to "much less than usual". The responses for each question vary slightly depending on the question. A binary scoring method, "the GHQ method" was used (0, 0, 1, 1) as this was found to be the most valid scoring method for the GHQ-12 (Goldberg *et al.,* 1997). Scores on the GHQ-12 can range from 0-12. The questionnaire can used to measure mental health on a continuum basis, where higher scores represent higher levels of mental distress. It can also be used to screen for the presence of mental illness using a cut-off score. A cut-off score of 4 was chosen for the current study to identify participants who were likely to have a mental illness. This cut-off was previously used in a study by Schneider *et al.* (1999), which examined the factors associated with carer burden in a cross-national study of caregivers of people with Alzheimer's disease. For the purposes of the current study it was felt that a measure of current psychiatric wellbeing would be appropriate given the unpredictability of alcohol problems. It was felt that responses which reflected current functioning as opposed to historic complaints would be more appropriate in light of the fact that the other measures being used also examined current functioning (coping and expressed emotion).

2.4.2. *The Family Attitude Scale (FAS)*

The Family Attitude Scale (Appendix B) was developed by Kavanagh *et al.* (1997) in response to a need to develop a simple measure which reflected the variables traditionally measured by the Camberwell Family Interview (CFI; Vaughn & Leff, 1976). The initial questionnaire was used with mothers of patients with schizophrenia; however it has since been used in studies of relapse rates in alcohol problems (Fichter *et al.,* 1997; O'Farrell *et al.,* 1998). The FAS scale consists of 30 items to which

respondents provide a response on a scale ranging from "Every day" (4) to "Never" (0). Ten of the items on the scale are reversed scored and the scores are then summed, the maximum score being 120. Higher scores on the FAS indicate higher levels of criticism and hostility. Although the Family Attitude Scale has traditionally been used as a measure of expressed emotion to predict relapse in psychiatric disorders, in this study the measure is being used to explore predictors of mental health outcomes for caregivers of people with alcohol problems and whether there exist differences between male and female caregivers of people with alcohol problems in terms of expressed emotion (EE). Expressed emotion has previously been found to be linked to relapse rates of people with alcohol problems (Fichter *et al.,* 1997; O'Farrell *et al.,* 1998). O'Farrell *et al.* (1998) also found that spouses of people with alcohol problems displayed high levels of criticism and hostility; two components of expressed emotion which are measurable using the FAS.

Kavanagh *et al.* (2008) reported that a cut off score of >51 on the FAS correctly classified those with high expressed emotion on the CFI in 77% of cases. In the current study a cut-off score of 51 will be used to differentiate high and low expressed emotion. Analysis of the questionnaire revealed a high level of internal consistency (*g* alpha = 0.95 to 0.97). This study also demonstrated that FAS scores were significantly associated with CFI scores in the domains of hostility, criticism, and warmth, but not emotional overinvolvement (Kavanagh *et al.,* 1997). The study concluded that the FAS could be used as a measure of expressed emotion (EE) in situations where EE is largely determined by criticism and hostility (Kavanagh *et al.,* 1997). In the case of alcohol problems, Fichter *et al.* (1997) and O'Farrell *et al.* (1998) demonstrated that emotional overinvolvement is not positively associated with

relapse in alcohol problems. For this reason the FAS was deemed an appropriate measure of EE in this population.

A recent study into the validity and consistency of the FAS was carried out by Kavanagh *et al.* (2008). Once again the study demonstrated the internal consistency of the FAS, where a significant association was found with negativity in relationships, frequently occurring problems for the patient, and greater levels of concern (Kavanagh *et al.,* 2008). This study also found that there was a strong correlation between FAS scores and the level of stress of the family member/carer, and interestingly this was found in mothers as opposed to fathers of 60 patients with a diagnosis of psychosis, suggesting that gender differences exist in the caring role.

2.4.3. *The Coping Questionnaire*

The Coping Questionnaire (Orford, 1996) was designed to assess how family members had coped with problematic drinking, drug taking, or gambling over the preceding 3 month period. The measure was originally designed for the wives/partners of alcohol dependent males, however has since been adapted for use with any family member and is no longer limited to alcohol problems alone. The current 30-item questionnaire was devised following a study by Orford *et al.* (1998). Factor analysis was carried out on the original scale which comprised 68 items reflecting 8 supposedly varying coping styles. The analysis revealed three separate factors reflecting distinct coping styles: withdrawal coping, engaged coping, and tolerant-inactive coping. Since this time, the shortened 30-item scale has been devised to reflect these three factors. Overall, the Coping Questionnaire has good internal reliability (Cronbach's alpha; 0.85; Orford *et al.,* 2005), the engaged coping subscale

has internal reliability ranging from 0.82 to 0.85 and the tolerant-inactive subscale from 0.73 to 0.78. The withdrawal coping subscale demonstrated the lowest internal reliability, ranging from 0.6 to 0.7 (Orford *et al.,* 2005).

The measure comprises 30 statements relating to coping with an addiction problem of a family member. Two versions of the scale were used; one for family members of male drinkers and one for family members of female drinkers (Appendix C and D). The questions in both scales are identical, only the anchor words relating to the gender of the person with the alcohol problem differ. Respondents can choose from four response options: no, once or twice, sometimes, or often. These are respectively scored as 0, 1, 2, and 3. The overall score can range from 0 – 90 and reflects the overall coping responses as well as the statements relating specifically to the three coping subscales. For the engaged coping scale the scores can range from 0 to 42, 0 to 24 for the withdrawal scale, and for the tolerant-inactive scale 0 to 27[b]. The subscales of the questionnaire are not mutually exclusive, so it is possible for a respondent to reflect more than one type of coping behaviour. Certain items contribute in a positive way to the tolerant-inactive subscale and negatively to the withdrawal coping scale. The questionnaire was administered using the instructions that accompany the scale.

2.4.4. *The Causal Dimensions Scale*

The Causal Dimensions Scale was devised by Russell (1982) to measure attributions based on a cause that is stated by the respondent. The scale is based on the three causal dimensions identified by Weiner (1979) which are stability (i.e. the cause of the problem is perceived as being either stable or unstable), locus of causality (the

[b] *Item 5 contributes positively to the engage coping score and negatively to the withdrawal coping score*

cause is seen as either controlled by internal factors, i.e. those relating to characteristics of the person with the problem, or external factors, i.e. those for which the person with the problem is not responsible), and controllability (under the control of the individual or not under their control). The authors devised a series of semantic scales to measures the respondents' perceptions of a prespecified cause. The authors found that each of the three subscales was internally consistent, and are valid measures of Weiner's (1979) causal dimensions. Each dimension was subjected to an analysis of variance to study the size of the main effect for that dimension. The main effects demonstrated that locus of causality and stability are valid measures, however much of the variability in the controllability dimension was accounted for by locus of causality. The items for this subscale were then altered and the main effect for that dimension accounted for 14-26% of the variance. Factor analysis demonstrated that the factor structure was consistent with the three subscales of the measure (Russell, 1982). The scale was originally devised to measure causal dimensions in a non-specific domain; however Kellett (2002) adapted the scale for use with problem drinkers.

McAuley *et al.* (1992) demonstrated that both the stability and causality dimensions of the scale have satisfactory internal reliability coefficients (0.67). McAuley *et al.* (1992) altered the scale on the basis that the controllability dimension had a lower internal reliability coefficient. The revised scale involved a personal control and an external control scale. On account of the fact that participants in this study are referring to the alcohol use of another person and not their own alcohol use, it was decided to use the original version of the Causal Dimensions Scale, as to use the amended scale may have proved too confusing for the participants.

The scale (Appendix E) instructs participants to write down, in their own view, what they deem to be the main cause of the alcohol problem of another. They are then asked to rate this cause or reason on 9 separate scales, relating to the three dimensions of "controllability", "stability", and "locus of causality" on a Likert scale from 0 to 9. The scale was also amended so that the verbal anchors of the scale related to the drinking of another person rather than to the drinking behaviour of the participant.

2.4.5. *Demographic Questions*

Prior to completing the above measures, participants were requested to complete two demographic information sheets. The first of these related to the participant and included questions about gender, age, relationship to the patient, employment status and a question regarding the participants perception of how long the family member's alcohol use had been problematic, measured in years and months (Appendix F). The second sheet requested demographic information in relation to the family member with the alcohol problem, and also included questions on gender, age, and employment status (Appendix F).

2.5. Procedure

2.5.1. *Recruitment of participants*

Participants were recruited between March 2008 and November 2008. The sample was recruited through one NHS specialist alcohol service and through a non-statutory service for carer's of people with alcohol problems. Inclusion criteria for the study required that the participant lived with the person with the alcohol problem and had

recent experience of coping with excessive drinking; i.e. the problem drinker could not be in a prolonged period of abstinence.

2.5.2. *NHS specialist alcohol service*

In the NHS service, the principal researcher attended a specialist alcohol service outpatient psychiatry clinic on a weekly basis. All patients, attending appointments at the outpatient clinic were offered information about the study (Appendix G). For those who had family members present at appointments, consent was obtained from the patient of the service prior to approaching the family member. The family members were then provided with information about the study (Appendix H) and were given 48 hours to consider the information. Those participants who were interested then contacted the researcher via telephone or mail to register their interest in the study. Participants were asked to sign a consent form agreeing to participate in the study (Appendix I). Potential participants present at the clinics were provided with an opportunity to ask any questions relating to the study.

Those patients who did not have family members present at the outpatient appointments were provided with information packs which they could choose to pass on to a family member if he/she were interested in the study. These packs included an introductory letter (Appendix J), a participant information sheet (Appendix H) and a consent form (Appendix I). It is noteworthy that many of the patients approached did not have contact with family members and other patients attended appointments with paid support workers. Some patients reported that their family members were not aware of the problem, whilst others reported that they did not want to increase the burden on family members by requesting their participation. Patients were provided

with an opportunity to discuss the study with the principal researcher and any questions about the study were answered at this time. Patients and participants were also provided with contact details for the main researcher should they have any further questions or queries. In the instance where the principal researcher did not hear from family members who had been provided with an information pack no further action was taken.

Patients attending appointments with community psychiatric nurses (CPN) from the NHS specialist alcohol service were also provided with information regarding the study by the CPN. Those who were interested were provided with information packs which they could choose to pass on to family members who may be interested in participating in the study. Once again, the contact details of the principal researcher were provided to all patients and participants approached. Potential participants once again could phone the principal researcher or respond using a pre-paid envelope to register their interest.

2.5.3. *Non-statutory Service*

The non-statutory service had a staff member who was assigned to working directly with family members/carer's of people with an alcohol problem. A group for family members of people with alcohol problems was run conjointly by the non-statutory service and the NHS specialist alcohol service as part of routine care. The group was co-facilitated by the principal researcher. During the data collection time period, four separate groups were run. Family members who attended the group were approached by the principal researcher and, if interested, were provided with information regarding the study. In these cases there was no direct contact with the person with the

alcohol problem; however only those who had a family member receiving treatment at the NHS specialist alcohol service were included in the study. Once again, potential participants were given 48 hours to consider the information and those who were interested contacted the principal researcher by telephone or using a pre-paid envelope.

2.5.4. *Data Collection*

Where consent was obtained from the participant (Appendix I), the principal researcher contacted that person by telephone to arrange to meet with him/her at a convenient time and location to complete the questionnaires. Face-to-face meetings occurred in the participants' homes, or at an NHS service. Participants were again briefed on the aims of the study and were assured that they could choose to withdraw from the study at any time. In all cases, the questionnaires were self-administered, however the principal researcher was available to answer any queries regarding the study or the questions contained in the questionnaires. Kellett (2002) reported that the Causal Dimensions Scale could be difficult for people to understand and help may be required when completing it. Completion of the questionnaires (FAS, The Coping Questionnaire, The GHQ-12, and the Causal Dimensions Scale) took approximately 20 minutes. Participants were not provided with any compensation for completing the questionnaires. A short letter was written to the GP of all participants informing them of the participants' involvement in the study (Appendix K). Each completed questionnaire was numbered and the name of the participant did not appear on the questionnaire. The data were then recorded on an SPSS database and analysed using t-tests and correlational analysis.

2.6. Ethical Approval

The study was approved by the University of Edinburgh and by the Lothian Research Ethics Committee. Ethical approval was granted for recruitment of participants through NHS sites (Appendix L).

3. RESULTS

The primary aim of this research was to determine whether male and female caregivers of people with alcohol problems differ with respect to their coping strategies, mental health outcomes, expressed emotion, and attributions. The study also aimed to examine the relationships between these factors, in order to determine where best to focus interventions for family members of people with alcohol problems.

3.1. Normality and Homogeneity of variance

All variables included in the analysis were subjected to the Shapiro-Wilk test of normality, as it is more accurate for smaller sample sizes (Conover, 1999; Field, 2005). The results demonstrated that all distributions were normal, with the exceptions of male GHQ-12 scores ($W(20) = .77$, $p<.001$), and female engaged coping ($W(35) = .93$, $p<.05$). For this reason analysis was conducted using a combination of parametric and non-parametric tests.

Histograms displaying the distributions for the non-normal variables and a summary of the tests of normality can be found in Appendix M and Appendix N.

In order to determine whether there was homogeneity of variance between the participants recruited from different sites, a Levene's test was carried out. Participant groups recruited from the NHS specialist alcohol service and the non-statutory service showed homogeneity of variance on all variables except GHQ-12 scores, where there was a greater distribution of scores amongst the non-statutory group participants; see Figure 3.1. On the basis that the primary research question was concerned with gender

of the participant rather than location of recruitment, participants from the NHS specialist alcohol service and the non-statutory service were grouped together for all analysis.

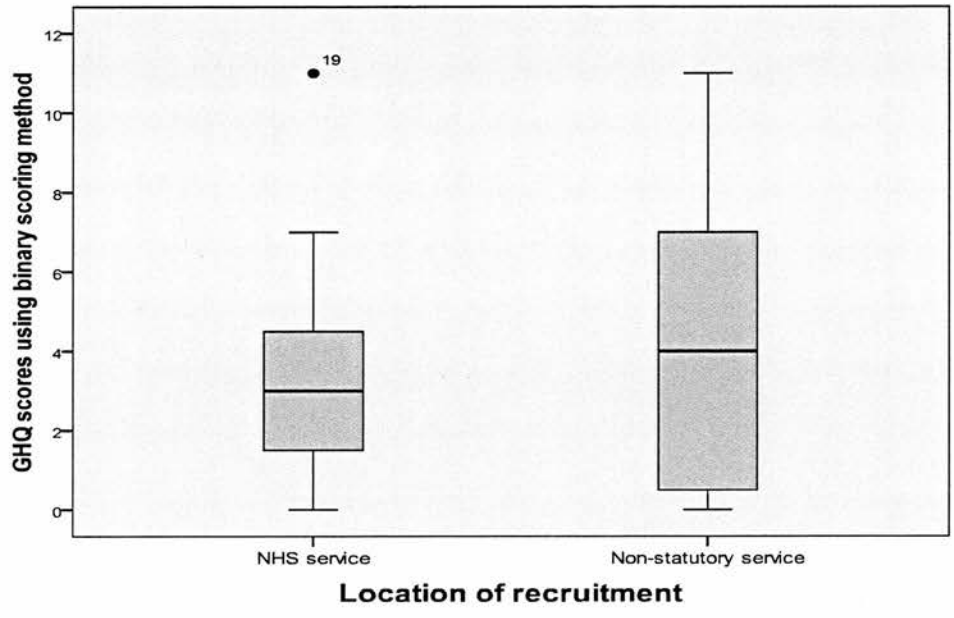


Figure 3.1. Boxplots showing the range of scores on the GHQ-12 for the NHS service and the non-statutory service.

3.2. The General Health Questionnaire (GHQ-12)

3.2.1. *Descriptive analysis*

The scores on the GHQ-12 for all participants ranged from 0-11 (Mean = 3.82; SD = 3.20). The possible range of scores on the GHQ-12 is from 0-12. Table 3.1 shows the means and standard deviations for male and female participants.

Table 3.1. Table showing the means and standard deviations for male and female GHQ-12 scores

	Males		Females	
	Means	*SD*	*Means*	*SD*
GHQ-12	2.30	2.59	4.66	3.23

A cut-off score of 4 or more was used to classify GHQ-12 scores with regard to psychiatric caseness. Using this cut-off score 47.31% of participants were classified as possible psychiatric cases and 52.72% were classified as not reaching the criteria for psychiatric caseness.

3.2.2. *Between groups analysis*

Hypothesis 2 predicted that females would have significantly higher scores on the GHQ-12 than males. In order to test this hypothesis, a Mann Whitney U test was carried out since some of the data relating to the GHQ-12 did not meet the assumptions for parametric testing. The Mann Whitney U test is appropriate for samples of differing sizes (Clark-Carter, 1997). The results of the analysis demonstrated that females had higher scores ($M = 4.66$, $SD = 3.23$) than males ($M = 2.30$, $SD = 2.59$) on the GHQ-12, and this result was statistically significant ($U = 242$, $p < .05$). This finding supports previous findings relating to female caregivers; Parks and Pilisuk (1991) and Pinquart and Sorenson (2003) found that female caregivers have poorer mental health outcomes than their male counterparts.

A Pearson's chi-square was carried out to examine further the relationship between gender and cut-off scores for possible cases of mental ill-health as measured by the

GHQ-12. The results indicated a statistically significant association between gender and cut-off scores (χ^2 (1) = 6.25, $p < .05$). These results seem to represent the fact that based on the frequencies, females caregivers in this sample are more likely than male caregivers to reach cut-off scores for possible cases of mental ill-health based on their scores on the GHQ-12. 60% of female participants had scores of 4 or above on the GHQ-12, whereas only 25% of the male sample had similar scores.

3.3. The Coping Questionnaire

3.3.1. *Descriptive analysis*

Overall Coping Quotient scores for both groups ranged from 13-75 (mean 48.85; SD 12.75). The Coping Questionnaire also provides separate scores for each of the three subscales; engaged coping, tolerant-inactive coping, and withdrawal coping. Engaged coping comprises "supportive", "controlling", "emotional", and "assertive" behaviours; tolerant-inactive coping comprises "self-sacrifice", "acceptance", and "inactive" strategies; and withdrawal coping involves "independent" and "avoidant" coping behaviours. The range of scores for the engaged coping subscale were from 7-40 (mean 26.53; SD 7.66). The scores for the tolerant-inactive subscale ranged from 0-26 (mean 11.84, SD 5.85). The range of scores of the withdrawal subscale were from 2-19 (mean 10.00; SD 4.25). Table 3.2 shows the range of scores for the male and female groups including means and standard deviations. Table 3.2 also includes the item mean scores for each of the three subscales (since the number of items associated with each subscale differed, the item mean score provides a mean score for each subscale allowing for direct comparisons across the subscales).

Table 3.2. Mean scores, standard deviations, and range (possible and observed) for male and female participants on the Coping Questionnaire

	Mean scores		Standard	Possible	Observed
	Total scores	Item mean scores	deviation	range	range
Total coping				**0-90**	
Male	46.65	.51	11.47		27-64
Female	50.11	.57	13.42		13-75
Engaged		**1.89**		**0-42**	
Male	25.91	1.85	8.22		12-40
Female	26.89	1.92	7.48		7-38
Tolerant		**1.32**		**0-27**	
Male	10.51	1.17	4.73		0-18
Female	12.62	1.40	6.34		0-26
Withdrawal		**1.25**		**0-24**	
Male	10.30	1.29	4.14		3-19
Female	9.89	1.24	4.36		2-18

Hypothesis 4 predicted that engaged coping would be used more frequently than tolerant-inactive coping and also withdrawal coping. Since the data relating to engaged coping were found to be non-normal, a Friedman's ANOVA was conducted on the overall item mean scores for engaged coping, tolerant-inactive coping, and withdrawal coping to determine which coping strategy was reported to have been used most frequently amongst the sample of participants. The results demonstrated

significant differences between the frequency of use of the three coping strategies ($\chi^2(1) = 32.63$, $p < .001$). A Wilcoxon signed ranks test was then conducted to determine where the significant differences lay between the three coping styles. A Bonferroni correction was used to control against the familywise error, and a significance level of .01 was utilised as it reflected the standard significance level of .05 divided by the number of comparisons being made (3) (Field, 2005). The results demonstrated that the sample reported using significantly more engaged coping than tolerant-inactive coping ($z = -5.22$, $p < .001$) and withdrawal coping ($z = -5.03$, $p<0.001$). There was no significant difference between reported use of tolerant-inactive coping and withdrawal coping ($z = -.40$, $p>0.01$, NS); hypothesis 4 is supported. Philpott and Christie (2008) found that a sample of male partners of female alcohol abusers reported using primarily engaged coping, followed by tolerant-inactive coping, and used withdrawal coping least frequently. A similar trend was reported by Orford *et al.* (2001) for both a male and female sample.

3.3.2. *Between groups analysis*

The mean data for coping responses showed that females reported using more coping responses than males. Hypothesis 1 predicted that females would use more engaged and tolerant-inactive coping than males and males would use more withdrawal coping than females. Examination of the means for the two sample groups showed that the data reflected this hypothesis, females used more engaged and tolerant-inactive coping than males, and males reported using more withdrawal coping than females. This in keeping with the findings of Orford *et al.* (2001). In order to investigate whether the male and female samples differed significantly with regards to the frequency or types of coping strategies used, a between groups analysis was

conducted. Because some of the data relating to the Coping Questionnaire were not normally distributed, a combination of parametric and non-parametric statistics were used (Field, 2005). The non-parametric statistic used was the Mann-Whitney U test. The Mann Whitney-U test was used to compare male and female samples in terms of engaged coping. Independent sample t-tests were used to compare male and female samples with regard to the overall coping quotient score, withdrawal coping, and tolerant-inactive coping. The analysis demonstrated that the two samples did not differ significantly with regards to their overall use of coping strategies ($t(53) = -.96$, $p > .05$, NS), or their use of engaged ($U = 32.00$, $p > .05$, NS), tolerant-inactive ($t(53) = -1.29$, $p > .05$, NS) or withdrawal coping ($t(53) = .34$, $p > .05$, NS). Hypothesis 1 is not supported.

3.4. The Family Attitude Scale (FAS)

3.4.1. *Descriptive analysis*

The scores on the FAS for all participants ranged from 14-111 (mean = 63.24; SD = 22.53). The range of scores for the male group was 27-95, and for the female group was 14-111. Table 3.3 shows the means and standard deviations for the male and female groups. The percentages of males and females classified as High and Low expressed emotion (EE), as seen in Table 3.4, demonstrated that a higher proportion of males than females were classified as High EE. In total, 74% of the entire sample was classified as High EE, measured by the FAS.

Table 3.3. Means and standard deviations for male and female FAS scores.

	Males		Females	
	Means	*SD*	*Means*	*SD*
FAS	61.70	17.49	64.11	25.17

Table 3.4. Percentages of male and female respondents with cut-off scores for high and low EE (frequencies in brackets)

	Males	Females
High EE	80.00 (16)	71.40 (25)
Low EE	20.00 (4)	28.61 (10)

3.4.2. *Between groups analysis*

Hypothesis 2 predicted that females would report higher scores on the FAS than males. An independent samples T-test was performed on the data. The results showed that male and female caregivers in this sample did not differ significantly in their levels of hostility and criticism as measured by the FAS ($t(53) = -.38$, $p > .05$, NS, one-tailed). Pearson's Chi Square test was carried out to examine any relationship between gender and High and Low EE as measured by the FAS. The results were not significant; therefore hypothesis 2 is not supported ($\chi^2(1) = .49$, $p > .05$, NS). See Appendix O for boxplots representing male and female FAS scores.

3.5. The Causal Dimensions Scale

3.5.1. *Descriptive analysis*

The Causal Dimensions Scale provides three subscale scores for the following dimensions: Locus of causality, stability, and controllability. Total scores on each dimension range from 3-27. For all participants the range of scores for locus of causality ranged from 10-27; the range for stability was from 3-27; and for controllability was 3-26. The median of each dimension is 15; scores on or above the median were seen as attributions of an internal locus of control, a stable cause, and a controllable cause. Scores below the median represented attributions for an external locus of control, an unstable cause, and an uncontrollable cause. Table 3.5 shows the mean scores, standard deviations, and range for male and female caregivers. Hypothesis 5 predicted that all participants would make more internal rather than external and more controllable rather than uncontrollable attributions relating to the cause of the alcohol problem. Examination of the means scores of the data demonstrated that 80% of participants made internal rather than external attributions relating to the cause of the problem, thus offering some support to Hypothesis 5. This finding was tested using a Chi Square test which found that participants made significantly more internal attributions than external attributions ($\chi^2(1) = 19.80$, $p < .001$). Only 47% of the sample made controllable rather than uncontrollable attributions, therefore the latter part of hypothesis 5 is not supported. See Table 3.7.

Table 3.5. Means (standard deviation in brackets) and observed score ranges for males and female groups on the Causal Dimensions Scale

	Males		Females	
	Means (SD)	*Range*	*Means (SD)*	*Range*
Locus of Causality	19.25 (4.03)	11-26	19.29 (4.19)	10-27
Stability	14.90 (4.86)	8-24	16.00 (5.94)	3-27
Controllability	15.95 (5.36)	3-24	14.14 (5.14)	3-26

3.5.2. *Reasons for drinking*

When completing the Causal Dimension's Scale, participants were asked to record the main reason for the alcohol problem of a family member. Table 3.6 shows the primary reasons cited by males and females for the causes of a family members' alcohol problem. Only reasons that were cited by more than one participant are listed in the table. Appendix P gives a full list of the reasons cited by males and females. Many participants cited more than one reason; this is reflected in the percentages. The female group cited a total of 23 different reasons and the male group cited a total of 14 different reasons. Each female caregiver cited a mean of 1.37 reasons for the alcohol problem of a family member. Each male caregiver cited a mean of 1.41 reasons.

The following reasons were reported once in both the male and female groups: *Poor coping mechanisms, addictive personality,* and *financial problems/unemployment.* The following reasons were reported once in the male group and not the female group: *Drowning out upset, growing up in isolation, psychological* [*sic*], and *lack of control.* The following reasons were reported once in the female group and not the

male group: *Has not received the help required, lack of alternative things to do, history of sexual abuse, enjoys drinking, anxiety, fear of failure, hedonistic lifestyle, hiding from responsibility,* and *lack of confidence.*

3.5.3. *Between Groups Analysis*

An independent samples t-test was conducted on the three dimensions of the Causal Dimensions Scale to determine if males and females differed with regard to their attributions relating to the alcohol problem of a family member Hypothesis 3 predicted that females would make more external attributions than males with regard to the causes of the alcohol problem of a family member. No significant differences were found between the groups on scores on the dimensions of locus of causality ($t = -.03(53)$, $p > .05$, NS), stability ($t = -.70(53)$, $p > .05$, NS), and controllability ($t = 1.24(53)$, $p > .05$, NS), therefore hypothesis 3 was not supported.

Table 3.7 shows the percentages of male and female participants who scored above and below the median for each dimension. In order to determine whether males and females differed with regard to their strongest attributions relating to the alcohol problem of another, Pearson's chi square was conducted. The results were not statistically significant (stability: $r = .37$, $p > .05$, NS; controllability: $r = .75$, $p > .05$, NS; locus of causality: $r = .16$, $p > .05$, NS), indicating that males and females in this sample did not differ in their attributions of locus of causality, stability, or controllability when considering the causes of the alcohol problem of a family member.

Table 3.6.a. Summary of the most frequently cited reasons (% in brackets) by male caregivers for the cause of the alcohol problem of a family member.

Main reason given	Number (%) of male caregivers who gave the reason, N = 20	
Depression	6	(30.00%)
Breakdown of relationship	5	(25.00%)
Lack of confidence	3	(15.00%)
Peer group influences	2	(10.00%)
Social	2	(10.00%)
Low self esteem	2	(10.00%)

Table 3.6.b. Summary of the most frequently cited reasons (% in brackets) by female caregivers for the cause of the alcohol problem of a family member.

Main reason given	Number (%) of female caregivers who gave the reason, N = 35	
Reaction to life events	5	(14.28%)
Bereavement	5	(14.28%)
Family history of alcohol problems	5	(14.28%)
Loneliness	4	(11.42%)
Peer group influences	3	(8.57%)
Low self esteem	3	(8.57%)
Work related stress	3	(8.57%)
Breakdown of relationship	3	(8.57%)
Depression	2	(5.71%)

Table 3.7. Percentages of male and female caregivers scoring above and below the median on each of the causal dimensions (Frequencies in brackets)

	Male		Female	
	≥ 15	*Below 15*	*≥ 15*	*Below 15*
Locus of Causality	80.00 (16)	20.00 (4)	80.00 (28)	20.00 (7)
Stability	40.00 (8)	60.00 (12)	48.57 (17)	51.43 (18)
Controllability	55.00 (11)	45.00 (9)	42.85 (15)	57.14 (20)

3.6. Correlational Analysis

Correlational analysis was used to examine any relationships that existed between the dependent variables in the study; it is acknowledged that correlations detect relationships and not the direction of causality (Field, 2005). It was predicted by hypothesis 6 that higher frequencies of engaged and tolerant-inactive coping would be associated with higher GHQ-12 scores; it was also predicted that there would be a negative relationship between withdrawal coping and GHQ-12 scores. In order to test this hypothesis, a combination of parametric and non-parametric correlational analyses were carried out between the GHQ-12 score and the three item mean scores of the subscales of the Coping Questionnaire. The non-parametric correlation statistic used was Kendall's tau b, which was chosen as it has been found to be a better estimate of correlations than other non-parametric statistics (Howell, 1997). The results showed a significant positive correlation between tolerant-inactive coping and GHQ-12 ($r = .32$, $p < .01$, 1-tailed). A significant positive correlation was also found between engaged coping and GHQ-12 scores ($\tau b = .17$, $p < .05$, 1-tailed). A significant negative correlation was found between the GHQ-12 score and withdrawal coping ($r = -.28$, $p < .05$, 1-tailed). These findings support hypothesis 6.

These correlations were then run separately for the male and female groups; whilst no significant correlations were found between GHQ-12 scores and male engaged (τb = -.02, $p > .05$, NS) , tolerant-inactive (τb = .02, $p > .05$, NS) or withdrawal coping (τb = .01, $p > .05$, NS), the results remained significant for GHQ-12 scores and female engaged (τb = .23, $p < .05$), tolerant-inactive (r = .28, $p < .05$), and withdrawal coping (r = -.27, $p < .05$). The strongest correlation reported was between GHQ-12 scores and tolerant-inactive coping; this is in keeping with the findings of Orford *et al.* (2001), who reported that tolerant-inactive coping was most strongly correlated with scores on a measure of mental health. Orford *et al.* (2001) also found that engaged coping was correlated with mental health scores, and although the trend of their data indicated a negative correlation between withdrawal scores and a measure of mental health, a statistically significant result was not reported for this correlation (Orford *et al.*, 2001).

Hypothesis 6 also predicted that higher engaged and tolerant-inactive coping would be associated with higher scores on the FAS. Pearson's correlation co-efficient and Kendall's tau b were used to statistically examine the relationships. The Family Attitude Scale was significantly positively correlated with engaged coping (τb = .24, $p < .05$), and tolerant-inactive coping (r = .52, $p < .001$). These correlations remained significant when the analysis was run on the female sample alone (Engaged coping, τb = .25, $p < .05$; tolerant-engaged coping, r = .54, $p < .05$), however when it was run with the male sample alone the relationship was significant for the FAS score and tolerant-inactive coping (r = .43, $p < .05$), but not with engaged coping (r = .21, $p > .05$, NS). In order to further analyse the correlational relationships between the FAS score

and tolerant-inactive and engaged coping for the male and female groups, partial correlations were conducted controlling for engaged and then tolerant-inactive coping for the male and female sample. The results demonstrated that in the female sample, when tolerant-inactive coping was controlled for, the correlation between FAS score and engaged coping was no longer significant ($r = .07$, $p > .05$, NS). When engaged coping was controlled for, tolerant-inactive coping maintained a significant positive relationship with FAS score ($r = .41$, $p < .01$).

Within the male sample, tolerant-inactive coping had a significant positive correlation with FAS score when engaged coping was controlled for ($r = .39$, $p < .05$). A partial correlation between engaged coping and FAS score, controlling for tolerant-inactive coping was not conducted on the male sample, as the initial correlation between male FAS score and male engaged coping score was not significant. This analysis suggests that there is a stronger relationship between FAS scores and tolerant-inactive coping than between FAS scores and engaged coping. This analysis provides support for Hypothesis 6.

Hooley (1987) posited that high expressed emotion (EE) may be associated with people who attempt to exert control over behaviours that are uncontrollable. For this reason it was hypothesised (6) that those relatives who made controllable, or internal attributions relating to the causes of a family members alcohol problem were more likely to have high EE scores and also, higher GHQ-12 scores. A Pearson's chi-square was conducted on the overall frequencies of participants who had controllable/non controllable attributions and high and low EE classifications. Whilst no significant associations were found when the data set was analysed as a whole ($r = .38$, $p > .05$,

NS), a significant positive association was found for males between controllable attributions and high/low EE cut off scores on the FAS ($p < .05$, Fisher's exact test). Fisher's exact test was cited since the data violated an assumption of Pearson's chi-square; two of the cells had an observed and expected count of less than 5. For the male group a significant positive correlation was also found between controllability cut off score and GHQ-12 scores ($\tau b = .54$, $p < .01$). There were no significant correlations found for the female sample between FAS score and controllability ($r = -.02$, $p > .05$, NS) and the GHQ-12 score and controllability ($r = -.24$, $p > .05$, NS).

3.7. Additional Analysis

In order to determine whether a relationship exists between the reported duration of the drinking problem and the attributions made by caregivers, as measured by the Causal Dimensions Scale, a correlational analysis was carried out. Pearson's correlation coefficient was used for the analysis. No significant correlations were found between reported duration of problem drinking and locus of causality ($r = .05$, $p > .05$, NS) or controllability ($r = .15$, $p > .05$, NS). The results demonstrated a positive correlation between the dimension of stability and duration of problem drinking ($r = .34$, $p < 0.01$). Higher scores on the stability dimension of the scale represent attributions of the cause of the drinking problem as being stable over time as opposed to variable over time. Those caregivers who reported longer durations of drinking were also more likely to view the cause of the problem as being stable over time. When this analysis was carried out on the male sample alone, no significant correlation was found ($r = .16$, $p > .05$, NS). The correlation remained significant within the female group ($r = .47$, $p < .01$), suggesting that the relationship between duration of alcohol use and attributions of stability are more likely amongst females.

With regards to the reported duration of problem drinking by the patient, participant reports ranged from 12 months to 420 months, with a mean of 185.80 months and a median duration of drinking of 182 months, see Figure 3.2.

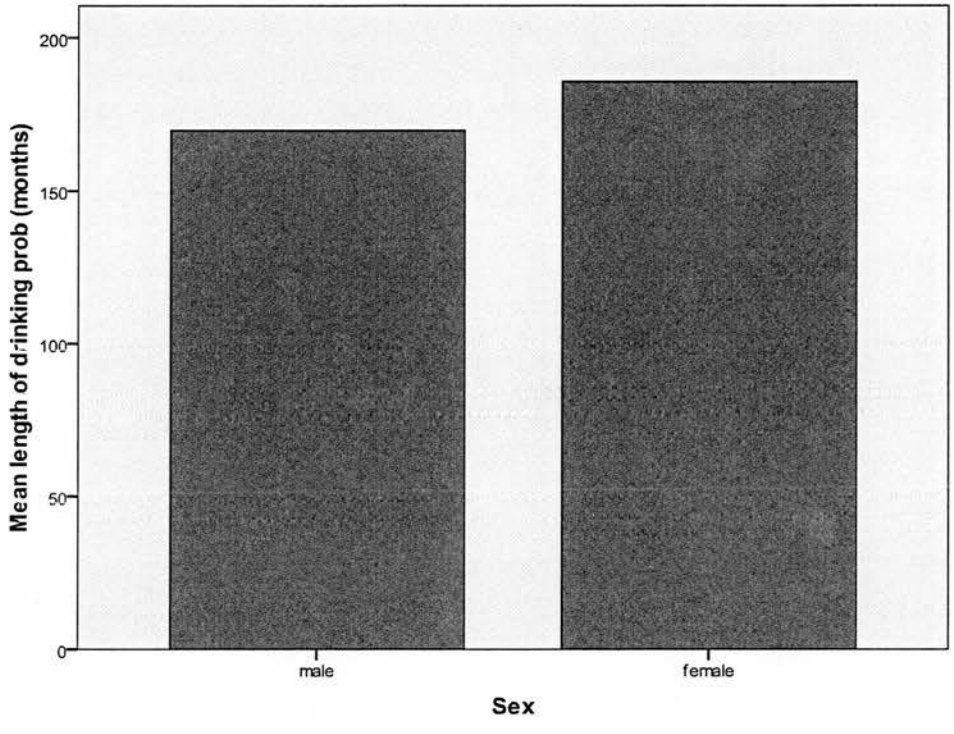


Figure 3.2. Mean reported duration of alcohol problem by male and female caregivers

Correlational analysis between the dimensions of the Causal Dimensions Scale showed a significant positive correlation between the dimensions of stability and controllability ($\tau b = .21$, $p < .05$). For this reason a partial correlation was carried out on the female sample, between reported duration of problem drinking and stability, controlling for controllability. The results showed that for the female sample, the relationship between reported duration of problem drinking and stability remained

significant, when controllability was statistically controlled for ($r = .04$, $p < .01$). Examination of the proportion of males and females who classified the cause of the alcohol problem as stable as opposed to unstable showed that a higher proportion of females than males classified the problem as stable, see Table 3.7. Since a significant correlation was found for females only between reported duration of alcohol problem and stability, an independent samples t-test was carried out on the means of the duration of problem drinking for the male and female sample. The result was not statistically significant ($t(53) = -.54$, $p > .05$, N.S.).

On the basis that controllability for the male sample was found to be correlated with both FAS scores and GHQ-12 scores and also on the basis that for the female sample, tolerant-inactive coping was correlated with both FAS and GHQ-12 scores, a correlational analysis was carried out to determine if there exists a significant relationship between GHQ-12 scores and FAS scores. The results revealed that there was no significant relationship between GHQ-12 scores and levels of EE as measured by the FAS scores ($r = .23$, $p > .05$, NS).

4. DISCUSSION

Previous research into caregivers of people with alcohol problems has examined primarily the coping skills and mental health outcomes of this population (Hurcom *et al.*, 1999; Orford *et al.*, 2001; Philpott & Christie 2008). Whilst Orford *et al.* (2001) reported differences between male and female caregivers their research was predominantly focused on cultural differences in caregiving between a Mexican and an English population. Hurcom *et al.* (1999) focused solely on female caregivers, whereas Philpott and Christie (2008) examined only the coping responses of male caregivers. Research has also been carried out on the role of expressed emotion in relationships involving a person with a drinking problem (Fichter *et al.*,1997; O'Farrell *et al.*, 1998), however the outcome measure used in these studies was the relapse rates to drinking and no outcome was recorded for the caregiver involved. Barrowclough *et al.* (2005) and Niv *et al.* (2007) examined the role of attributions on relationships where one person is abusing substances (including alcohol). Both of these studies examined attributions relating to individuals with comorbid conditions; substance misuse and mental health problems. Whilst all of the aforementioned studies examined potential influencing factors on relationships where one person is misusing alcohol, the author is unaware of a study which has looked at all of these factors together, specifically in relation to the impact that they have on the family member who is not misusing alcohol. For this reason much of the analysis conducted in the current study was exploratory in nature and the study did not set out to provide a comprehensive model of the experiences of caregivers of people with alcohol problems. Instead the study aimed to identify specific factors that may influence the coping and mental wellbeing of caregivers.

4.1. General Health Questionnaire-12 (GHQ-12)

The GHQ-12 was used in the current study to assess the mental health of caregivers of people with alcohol problems. Exploratory analysis of the GHQ-12 revealed that the data relating to this measure was not normal for the male sample. Examination of the data revealed that female GHQ-12 scores had a much larger variance than male scores and that the male scores were negatively skewed. In support of hypothesis 2, the findings showed that female caregivers of people with alcohol problems report poorer mental health than male caregivers, indicating that female caregivers in this domain may experience more mental health problems than their male counterparts. Although it is acknowledged that participants were not assessed for any pre-existing mental health conditions, with the exception of alcohol problems, support for this finding is provided by previous research into the area of caregivers' mental health. Similar findings have been reported for female caregivers in other mental health settings. Parks and Pilisuk (1991) found that female caregivers of people with Alzheimer's disease reported more anxiety than male caregivers and Lutzy and Knight (1994) also found that female caregivers reported higher levels of distress than male caregivers. It has previously been suggested in the current research that the experience of caring for a person with Alzheimer's disease bears some similarities to caring for a person with an alcohol problem, when one considers the memory problems, confusion, behavioural change, and aggression that can occur in both disorders. In the field of alcohol problems, Orford *et al.* (2001) also concluded that female spouses of male substance abusers were a more vulnerable group with regard to their mental health. Orford *et al.* (2001) attributed this vulnerability to mental health problems to coping strategies used most frequently by female spousal caregivers, i.e. tolerant-inactive coping and engaged coping.

4.1.1. *Cut-off scores identifying possible cases of mental ill health*

With regard to the degree of possible cases of mental ill health identified in this sample, 47.3% of participants reached the cut-off score for possible caseness. When the data were analysed using a cut-off score of 4 to represent possible mental ill health cases, again a significant difference was found between males and females. Whereas 60% of the female participants scored above 4 on the GHQ-12, only 25% of males scored in this range. The finding for females is comparable to the findings of Schneider *et al.* (1999) who reported that 58% of caregivers of people with Alzheimer's disease in a cross-cultural study reached the cut-off for "probable cases of mental ill health" (Schneider *et al.,* 1999, p.655) as measured by the GHQ-12. On the basis of this it could be contended that caregivers of people with alcohol problems, particularly female caregivers, experience similar levels of distress and mental ill health as caregivers of people with Alzheimer's disease. It also supports the argument that female caregivers experience poorer mental health than their male counterparts. Pinquart and Sorenson (2003) suggested that female caregivers experience more negative consequences of caregiving because they are more likely to take on the role due to social pressures and are less likely to ask for help than males.

4.2. Coping Questionnaire

The scores of the Coping Questionnaire (Orford, 1996) demonstrated that male and female caregivers engaged in a variety of coping behaviours to help them deal with the alcohol misuse of a family member. Previous research into the coping skills used by family members of people with alcohol problems has demonstrated that families tend to use more than one coping strategy and also that there can be overlap between the coping strategies used (Orford *et al.*, 1998; Orford *et al.*, 2001). The work of

Orford and colleagues identified three main coping strategies used by family members; engaged, tolerant-inactive, and withdrawal. It was previously reported by Orford *et al.* (2001) that family members of people with alcohol problems use predominantly engaged coping, followed by tolerant-inactive coping, and withdrawal coping is used least frequently. Orford *et al.* (1975) reported that engaged coping tended to be used when there were more problems to cope with.

The current study hypothesised that engaged coping would be utilised most frequently and that withdrawal coping would be used least frequently. It was found that across genders, engaged coping was used more frequently than tolerant-inactive coping, and this result was statistically significant, which suggests that perhaps caregivers in this study had many problems to cope with on the basis of the findings of Orford *et al.* (1975). Withdrawal coping was used less frequently than tolerant-inactive coping; however this result was not statistically significant. Philpott and Christie (2008) reported similar findings to the current study; within a sample of male partners of female drinkers, engaged coping was used most frequently and withdrawal coping was used least frequently, suggesting that the trend for engaging in particular coping strategies does not differ across gender, i.e., both males and females utilise predominantly engaged coping, and use withdrawal coping least frequently.

4.2.1. *Engaged, tolerant-inactive, and withdrawal coping*

Orford *et al.* (1998) stated that engaged coping, i.e. coping that encompasses "supportive", "controlling", "emotional", and "assertive" behaviours is more common and may be more functional when the person with the drinking problem is at a stage where change is being contemplated. Philpott and Christie (2008) concluded that the

high occurrence of engaged coping responses in their study could have been due to the fact that the sample of females with alcohol problems in their study were receiving treatment. Orford *et al.* (2001) reported a similar pattern of coping strategy use, however, no further indication was given with regard to whether or not the relative with the alcohol problem was engaged in treatment for the problem. The participants in that study were recruited through a mixture of services, including drug and alcohol services, public advertising, and community agencies.

In the current study, participants were only included in the study if the family member with the alcohol problem was engaged with the specialist alcohol service. The participants in the current study were self-selected; their interest in the study may have been related to a heightened interest in their family member's wellbeing, care, and treatment. This could offer an explanation as to why engaged coping was reported most frequently in the present study and in the studies by Orford *et al.* (2001) and Philpott and Christie (2008). Perhaps family members who encompass the behaviours and traits associated with engaged coping; "supportive", "controlling", "assertive", and "emotional", may be more willing to become involved in research associated with the treatment service being used by the person with the alcohol problem. Those family members who attended outpatient appointments with the person with the alcohol problem or who acknowledged mail inviting them to participate in a study relating to caring for a person with an alcohol problem are possibly less likely to report "independent" and "avoidant" behaviours, i.e. withdrawal coping. This is on the basis that withdrawal coping involves deliberate action by the caregiver to put distance between him/herself and the problem. It is unlikely that a caregiver who is attempting to distance him/herself from the alcohol problem of another will choose to participate

in a research study focusing on their coping strategies and attributions regarding the alcohol problem.

Orford *et al.* (2005) found that tolerant-inactive and engaged coping were both significantly associated with higher scores on a measure of mental health in a study of caregivers of people with alcohol problems. The findings of the current study and previous studies (Orford *et al.*, 2001; Philpott & Christie, 2008) found that engaged coping was the most prevalent coping mechanism used by caregivers of people with alcohol problems and that tolerant-inactive coping was the second most frequently used coping mechanism. This suggests that even in families where the person with the alcohol problem is receiving treatment, family members or caregivers still require support in adjusting their coping strategies to use strategies which have less of a negative impact on their own mental health outcomes.

These findings offer support to the statements of Miller (2003) and Copello *et al.* (2002), which emphasised that family members of people with alcohol problems should receive treatment in their own right. It cannot be assumed that because the person with the alcohol problem is receiving treatment then the familial relationships of that person will improve automatically. This study demonstrated that even caregivers whose family members are receiving treatment continue to frequently utilise the least beneficial coping strategies in terms of impact on their own mental wellbeing, i.e. tolerant-inactive and engaged coping.

The treatment approach described by Copello, Templeton *et al.* (2000) focused on reducing the stress and psychological problems experienced by family members and

consisted of 4-5 treatment sessions. Evaluation of that treatment demonstrated that it significantly decreased the amount of engaged and tolerant-inactive coping used by caregivers and increased the amount of withdrawal coping, thus leading to a reduction in physical and psychological symptoms reported by the participants (Copello, Templeton, *et al.*, 2000). The results of the current study found that the relationship between coping strategies and mental health outcomes was statistically significant for the female sample and not the male sample. The implications of these findings for clinicians working in the area of addictions or mental health is that caregivers of people with alcohol problems, particularly female caregivers, should be assessed regarding their mental health and their most prevalent coping style and that the appropriate intervention should be offered, in the form of brief interventions, including psychoeducation and support, as described by Copello, Templeton, *et al.* (2000).

The fact that significant differences were found between male and females in terms of their mental health but not in terms of the coping strategies used suggest that there are other factors which play a role for caregivers in determining their reported levels of mental ill health. As previously discussed, it is possible that male and female caregivers do not in fact differ in terms of the levels of distress experienced, but that females may be just more likely to report it (Lutzy & Knight, 1994). Clinicians should be mindful of this when assessing male caregivers of people with alcohol problems, since the evidence suggests that male and female caregivers do not differ significantly in their use of those coping strategies which have been found to be related to poor mental health outcome, i.e. tolerant-inactive and engaged coping.

4.3. Mental Health and Engaged Coping

Previous research in the area of alcohol problems has examined whether a relationship exists between the type of coping style used by a caregiver and their mental wellbeing. The current study demonstrated that no significant correlations existed between male coping strategies and mental health outcomes, as measured by the GHQ-12. Significant positive correlations were found when female engaged coping was correlated with mental health outcomes. This finding offered support to hypothesis 6. Whilst engaged coping was found to have a positive association with mental health scores, there is some evidence to suggest that it perhaps has some adaptive utility as a coping strategy. Orford *et al.* (1975) reported that engaged coping is the strategy that is most likely to be adopted when the caregiver has more problems to cope with. On the basis of this, it would be expected that since engaged coping is associated with high problem frequency, it would also be most highly associated with mental health outcomes. The results of the current study and a previous study (Orford *et al.,* 2001) have found that it is in fact tolerant-inactive coping which is most highly associated with poor mental health, yet the author is unaware of any reports to suggest that tolerant-inactive coping is associated with having more problems to cope with. Perhaps engaged coping is utilised more when the caregiver has more problems to cope with because it is somewhat adaptive in these situations.

Hurcom *et al.* (1999) found that the best predictor of psychological well-being for female spouses of male drinkers was the degree of hardship experienced by the spouse. Since Orford *et al.* (1975) reported that engaged coping was more prevalent when the caregiver had more to cope with, this could offer an explanation as to why the use of engaged coping is positively correlated with mental health scores, since it

could reflect the degree of hardship experienced by the caregiver. Therefore, its association with poor mental health outcomes could be more a reflection of its association with having more problems to cope with rather than it being a maladaptive coping strategy. Unfortunately further analysis of this proposal was beyond the scope of this study.

The strength of the relationship between engaged coping and mental wellbeing for female caregivers as opposed to male caregivers could also be explained by the findings of Turner and Avison (1989), who suggested that females are more vulnerable to the stresses of others and that this is reflected in their own mental wellbeing. If female caregivers are more susceptible to becoming distressed by the stresses of others, then they may perceive that they have more problems to cope with and therefore may report experiencing a larger degree of hardship than their male counterparts, thus utilising more engaged coping strategies and reporting poorer mental health.

4.4. Mental health and tolerant-inactive coping

Tolerant-inactive coping involves self-sacrifice, acceptance, and inactive strategies (Hurcom *et al.,* 1999). Hypothesis 6 stated that tolerant-inactive coping would be associated with higher scores on the GHQ-12. The findings of the current study supported this hypothesis and were in keeping with the findings of Orford *et al.* (2001), who found that tolerant-inactive coping was most highly correlated with poorer mental health outcomes for caregivers of people with alcohol problems. A review of the statements from the Coping Questionnaire which are linked to tolerant-inactive coping highlight that such coping is associated with negative emotions and

behaviours for the caregiver. These include, fear on the part of the caregiver, e.g. "felt too frightened to do anything"; enabling drinking behaviour, e.g. "Given him money even when you thought it would be spent on drink"; and passively dealing with the consequences of the problem, e.g. "put yourself out for him, for example by getting him to bed or by clearing up mess after him" (Orford, 1996). Tolerant-inactive coping seems to differ from engaged coping and withdrawal coping with respect to the amount of control the caregiver has and also with regard to the use of active strategies. In the case of engaged coping, the caregiver is assertive, controlling, and supportive. In withdrawal coping, the caregiver actively decides to put distance between him/herself and the person with the problem, or becomes independent of the drinker. When examining the components of tolerant-inactive coping, it appears that the caregiver lacks control and adapts his/her behaviour to suit the actions of the person with the drinking problem and reacts to the behaviours of the person with the problem.

The positive relationship that was found between tolerant-inactive coping and mental health outcomes was significant only for female caregivers. West and Simmons (1983) found that males tend to be taught to cope in a more problem-focused way than females. On the basis of this it could be argued that tolerant-inactive coping does not involve strong problem-focused behaviours; it could be seen as comprising behaviours which are a direct reaction to the behaviours of the person with the problem. In this sense, tolerant-inactive coping does not help caregivers to move forward with the problem with which they are trying to cope. However, since there was no significant difference between male and female scores on tolerant-inactive coping, in order to explain the female only correlation with mental health outcomes, it

is necessary to examine the proposals of Lutzy and Knight (1994). The findings of Lutzy and Knight (1994) suggested that gender differences in distress may simply be due to different reporting styles and differing uses of coping styles. Lutzy and Knight (1994) proposed that self-report measures may have a built in gender bias, since female caregivers may be more aware of their emotions and feelings and may be more likely to report them than males. Notarius and Johnson (1982) found that males were less likely than females to be aware of their emotions and to express them. It could be argued that certain facets of tolerant-inactive coping may evoke feelings of sorrow, fear, or shame amongst caregivers, for example, "providing the drinker with money when it is known that it will be spent on alcohol", or "clearing up mess after the drinker", or "feeling too frightened to do anything" (Orford, 1996). Perhaps female caregivers are more aware of their own emotions associated with tolerant-inactive coping behaviours, which may lead to more depressive or anxious affect, which is reflected in their scores on the GHQ-12.

The study by Orford *et al.* (2001) conducted qualitative analysis in order to examine why family members utilised tolerant-inactive coping when it has been found to be highly correlated with mental health outcome scores. The authors suggested that the use of tolerant-inactive strategies may be due to a variety of factors including; the level of stress experienced by the family, role socialisation, the nature of the relationship with the person with the alcohol or drug problem, and cultural norms relating to alcohol or drug misuse. Orford *et al.* (2001) reported a variety of reasons cited by family members to explain their use of tolerant-inactive coping. These included; being concerned and caring for the person with the problem, feeling the need to look after or keep the family going, having low self-confidence, having a

positive attitude towards the alcohol or drug use, and wanting to avoid problems or embarrassment (Orford *et al.,* 2001). The reasons cited by families reflect some of the aforementioned proposed feelings that could be related to tolerant-inactive coping, i.e. fear, shame, and sorrow, which, according to Lutzy and Knight (1994) are more likely to be in the conscious experience of females rather than males.

4.5. Mental health and withdrawal coping

Within the female sample in the current study a significant negative correlation was found between the use of withdrawal coping and scores on the GHQ-12, suggesting that females who engaged in more withdrawal coping had better mental health outcomes. This finding offers support to hypothesis 6. Withdrawal coping encapsulates "independent" and "avoidant" behaviours by the caregiver (Hurcom *et al.,* 1999). Copello *et al.* (2002) found that an intervention for family members of people with alcohol problems led to an increase in withdrawal coping and also a decrease in mental health scores, once again highlighting the negative relationship between the two. The idea of utilising avoidant type behaviours when coping with the drinking problems of another has previously been perceived as maladaptive for the caregiver (Moos, Finney, *et al.,* 1990). Indeed in other mental health settings, the use of escape-avoidance coping has been found to be linked to depressive affect for female caregivers of people with Alzheimer's disease (Lutzy & Knight, 1994). Goossens *et al.* (2008) found that distress amongst caregivers of people with Bipolar Disorder is more prevalent when an avoidant coping style is used. It is possible that the type of "avoidance" referred to by the Coping Questionnaire differs in a qualitative manner from the type of avoidance discussed by Moos *et al.* (1990), Lutzy and Knight (1994), and Goossens *et al.* (2008). The definitions of avoidance used by

Moos, Finney, *et al.* (1990) and Lutzy and Knight (1994) refer to behaviours which actively avoid confronting the problem. In the study by Goossens and colleagues (2008), avoidant coping involves "leaving the problem to what it is or running away from it" (Goossens *et al.,* 2008, p.306). It could be argued that these descriptions of avoidance allude to a lack of control on the part of the caregiver and lack any sense of decision making or problem-solving strategies. It is perhaps these qualities of avoidance which can lead to depressive affect or can be maladaptive for the caregiver. In the current analysis, the definition of avoidance involves deliberate actions by the caregiver to put distance between him/herself and the person with the alcohol problem. It could be argued that the difference between this type of avoidance and the aforementioned avoidance (Goossens *et al.,* 2008; Lutzy & Knight, 1994; Moos, Finney, *et al.,* 1990) is that the caregiver has made a deliberate decision based on an assessment of the situation. This definition also gives the sense that the caregiver is not necessarily avoiding the problem *per se,* but is instead choosing to actively avoid the person with the problem. This amounts to a qualitative difference between the two types of avoidance and may explain why for some "avoidance" is maladaptive and leads to negative affect, whereas for others "avoidance" can be seen as protective against mental health problems.

This finding is in keeping with the philosophy of Al-Anon, a self-help group for families and friends affected by the alcohol use of another. Ablon (1982) stated that those engaging in the Al-Anon approach are encouraged to detach themselves from the drinker. Al-Anon promotes independence and well-being for family members and friends affected by drinking problems (Fernandez *et al.,* 2006). The philosophy behind Al-Anon is comparable to the behavioural components of withdrawal coping

in the current study. Since withdrawal coping was negatively correlated with mental health outcomes for female caregivers, this suggests that adopting an Al-Anon approach may be most beneficial for caregivers. Studies which have examined the impact of Al-Anon on family life have demonstrated that it leads to reductions in depression and family conflict, as well as improvements in levels of happiness within relationships and improved family cohesion (Miller *et al.*, 1999).

4.6. Family Attitude Scale

Scores on the Family Attitude Scale demonstrated that 74% of the sample was classified as having high levels of expressed emotion. Hypothesis 2 predicted that females in this sample would have higher expressed emotion scores than males. The between groups analysis of the FAS demonstrated that although females had a higher mean score on the FAS than males, the male group had a higher proportion of participants who were classified as having high expressed emotion. The FAS scores for both the male and female groups were significantly positively correlated with tolerant-inactive coping; the coping strategy which is most highly correlated with poor mental health outcomes for female caregivers. Hooley (1987) proposed that the attempts of family members to control a situation which may be out with their control could be the reason for the development of high expressed emotion. In light of this proposed theory it might be expected that engaged coping would have more of a correlational relationship with FAS than tolerant-inactive coping, since engaged coping is defined as encompassing "controlling", "emotional, "supportive", and "assertive" behaviours, whereas tolerant-inactive coping encompasses "self-sacrifice", "acceptance" and "inactive" behaviours.

4.6.1. *Expressed Emotion and Controllability*

The current study did find some support for Hooley's (1987) theory relating to the association between expressed emotion and controllability. Since the current study was also concerned with attributions it was hypothesised that a controllable attribution regarding the cause of an alcohol problem would be associated with high expressed emotion. If a caregiver views a problem as being controllable, even when it is not controllable, it could be argued that they are more likely to attempt to exert control over the problem, a behaviour that Hooley (1987) proposed would be associated with high expressed emotion. A significant association was found in the male group; those who were classified as having high expressed emotion were also more likely to have made controllable attributions regarding the cause of the alcohol problem of their family member. Roussi (2002) examined the relationship between the types of coping strategies used in problem situations and the perceived level of control over the problem. It was found that problem-focused coping is associated with problems that are perceived as being controllable; both of which were found to be related to decreased levels of distress (Roussi, 2002). Roussi stated that his finding is true when there is an association between the perceived level of controllability and the actual controllability of the problem. As previously discussed, males tend to be taught to cope in a problem-focused manner (West & Simmons 1983); therefore they may be more likely to perceive a problem as being controllable. This finding may explain why the association between expressed emotion and controllability was evident in the male sample alone. On account of the associations found between problem-focused coping and gender, and also between problem-focused coping and perceived controllability, it is possible that in the current sample males were more likely than females to view a problem as being controllable. Attempts to control a problem which

is not controllable, such as alcohol problems, as defined by ICD-10 classification (ICD-10, 1992), may lead to higher scores on measures of expressed emotion (Hooley, 1987). Whilst it is acknowledged that making an attribution of control to the cause of a problem does not indicate that a caregiver also attempts to exert control over the problem, this finding does offer some support to Hooley's (1987) theory, as it demonstrates a link between control and expressed emotion.

4.6.2. *Expressed Emotion and Mental Health*

An interesting exploratory finding of this study was that, there was no significant relationship found between expressed emotion and mental health outcomes. On the basis that high expressed emotion, as measured by the FAS, is predominantly a representation of the levels of criticism and hostility displayed in a relationship, and is positively correlated with tolerant-inactive coping, it was felt that those caregivers who reported high levels of expressed emotion over the preceding three-month period would be more likely to report more mental health difficulties. It is possible that since the GHQ-12 is a screening tool for transient psychiatric problems, it may not have been sensitive enough to detect cases of specific mental health difficulties that have been found to be associated with caregiving, including anxiety (Fadden *et al.*, 2007; Orford *et al.*, 1998; Parks & Pilisuk, 1991), and depression (Parks and Pilisuk, 1991; Pinquart & Sorenson, 2003).

4.7. Causal Dimension's Scale

The Causal Dimension's Scale measures the perceived causal attributions for events; in the case of the current study, participants were asked to record what they perceived to be the main cause of the alcohol problem of a family member. Participants then

completed a questionnaire rating their attributions to this cause. A measure of attributions was included in this study as previous research had suggested that caregivers of people with comorbid mental health and substance misuse problems make more internal and controllable attributions relating to the symptoms of the person with the comorbid problem than caregivers of people with mental health problems alone (Niv *et al.,* 2007; Barrowclough *et al.,* 2005).

The current research found that caregivers made more internal than external attributions about the cause of the alcohol problem of a family member, suggesting that caregivers of people with alcohol problems perceive that the locus of the problem is more likely to be due to factors which are internal and controllable by the drinker. There was no significant difference found between male and female scores on the dimensions of locus of causality, stability, and controllability. It is noteworthy that the attributions reported in this data are reflective only of the causes of the alcohol problems of the specified family member, and do not represent stable attributional traits of the participants.

4.7.1. *Mental Health and Attributions*

The study also found that for the male group a significant positive correlation was found between attributions of controllability and scores on the GHQ-12, suggesting that males who make controllable attributions regarding the cause of an alcohol problem of a family member are more likely to have poorer mental health. This finding is in keeping with that reported by Barrowclough *et al.* (2005) who reported that controllable attributions made by family members, relating to the mental health and substance misuse problems of another, were associated with relationship

problems and family breakdown. According to Weiner's (1995) theory, when a controllable attribution is assigned to an illness behaviour, caregivers are more likely to display anger and are less likely to offer help or support. In the case of the current findings, it is possible that the negative behavioural and emotional features associated with attributions of controllability, which have previously been discussed in light of raised levels of expressed emotion, may also lead to poorer mental health.

The study found that in the female sample, attributing stability to the cause of the problem, i.e. seeing the cause as being a stable phenomenon as opposed to being something that varies with time, was positively correlated with the reported duration of drinking of the person with the alcohol problem. The female group reported longer mean duration of alcohol problems than the male group, although there was not a statistically significant difference. It is possible that a conceptual error occurred with this measure; the relationship between stability and reported duration of the problem might suggest that participants were making attributions regarding the alcohol problem itself, rather than the cause of the problem, for example, depression or bereavement.

For the female sample, coping strategies used appear to be strongly associated with their reported mental health. In the case of male caregivers, the above findings offer some evidence that it is the attributions made by males about the causes of someone's alcohol problem that seem to have an influence on their reported mental health and also their level of expressed emotion.

4.7.2. *Perceived causes of alcohol problems*

Participants were asked to report on what they believed was the main cause of the alcohol problem of their family member. The primary four reasons cited by males were "depression", "breakdown of relationship", "lack of confidence" and "peer group influences". For the female group, the four main reasons cited were "reaction to life events", "bereavement", "family history of alcohol problems", and "loneliness". It is noteworthy that there were no commonalities within the top four reasons cited by the two participant groups. Whilst these responses were not rated by an external rater, it could be argued the male responses reflect more internal and controllable attributions, whereas the female responses reflect more external and uncontrollable attributions. Bereavement, reaction to life events, having a family history of alcohol problems, and to a lesser extent, loneliness, are all factors which are potentially out with the control of the drinker. Parks and Pilisuk (1991) reported that female caregivers were more likely to have an external locus of control and that this was associated with higher rates of anxiety, when compared with male caregivers. It is acknowledged that the current study did not measure the locus of control of the caregiver; instead it measured caregiver's attributions regarding the locus of control of the person with the alcohol problem.

The proposal that male responses reflected controllable attributions is in keeping with the previously discussed concept that males may view problems as being controllable as this is associated with problem-solving (Roussi, 2002). Depression, lack of confidence, peer group influences, and the breakdown of a relationship are all potential areas that the drinker could control or amend in some way; the same cannot

be said for bereavement, family history of alcohol problems, and reaction to life events; three of the main reasons cited by the female group.

4.8. Implications for clinical treatment services

The coping strategies reported to be used most frequently in this study were engaged coping and tolerant-inactive coping, both of which have been found to be related to poor mental health outcomes. Orford *et al.* (2001) also found that these coping strategies impact negatively on physical wellbeing too. The utility of providing brief interventions for caregivers who use these coping styles would not only have immediate benefits for the caregiver in the domains of mental, but also physical health (Copello, Templeton, *et al.,* 2000). The relationship between high expressed emotion and tolerant-inactive coping for both genders could also be examined in clinical interventions, since high expressed emotion was found to be related to a greater use of tolerant-inactive coping. Copello, Templeton, *et al.* (2000) reported that tolerant-inactive coping responded most quickly to intervention when compared to engaged coping. Perhaps focusing interventions on reducing the amount of tolerant-inactive coping used by caregivers would also reduce their levels of expressed emotion. Such interventions could have a residual impact on the person with the alcohol problem since Fichter *et al.* (1997) and O'Farrell *et al.* (1998) found some evidence to support the idea that high expressed emotion is associated with relapse in alcohol problems.

This study also demonstrated that the influencing factors on caregiver mental health seem to vary for males and females. Coping strategies, i.e. the increased use of engaged and tolerant-inactive coping, seems to be indicative of mental health problems for females, whereas attributions relating to the controllability of the

problem seem to be associated with male mental health problems. For this reason, clinicians should be mindful when assessing for indicators of mental health problems in caregivers of people with alcohol problems. Having knowledge of the factors most influential for genders will allow clinicians to target interventions more specifically. Copello, Templeton, *et al.* (2000) described using a brief intervention which involved exploring the concerns of the family member, providing information, exploring the use of coping strategies, enlisting support, and considering other sources of professional help. The aim of the intervention was to help caregivers to engage in less engaged and tolerant-inactive coping and to utilise more withdrawal coping. In light of the findings of the current study, being able to target specific areas of vulnerability to mental health problems for male and female caregivers would be beneficial and may enhance the utility of such interventions.

4.9. Limitations, challenges, and future research

4.9.1. *Participant Information*

The current study was interested in the coping strategies of caregivers of people with alcohol problems. It was also concerned with the attributions that participants assigned to the causes of alcohol problems. For these reasons it may have been beneficial to collect information regarding the participants own use of alcohol, as alcohol could be used as a coping strategy and it could also have influenced the participant's perceptions of the alcohol use of their family member. It is possible that a participant who drinks heavily will perceive alcohol use differently to a participant who is abstinent from alcohol. This factor was acknowledged by the principal researcher; however it was decided not to include a question relating to the alcohol use of the participant. Since the research was linked to an NHS specialist alcohol

service and the principal researcher was an employee of that service, the researcher did not want potential participants to perceive the inclusion of a question relating to his/her alcohol use as a clinical assessment. It was also felt that participants may have been less likely to engage in the research if the demographic questions involved had been too personal in nature; the principal researcher had considered the fact that recruitment for this study would be difficult and that all efforts should be made to make the process as stress-free as possible for the participant.

The sole source of information regarding the person with the alcohol problem was the family member who participated in the current study. It is possible that their reports regarding the duration of the current problem may have been subjective in nature and it is possible that the data provided was not an accurate representation of the problem at hand. Similar to Hurcom *et al.* (1999) the focus of the current study was on the perceptions of the caregiver and their subjective experience of caring for a person with an alcohol problem. It was felt that gathering objective information from an NHS source regarding the alcohol problem of an individual may not have added greatly to the aims or outcomes of this study. From a practical point of view, the principal researcher did not have contact with those patients of the NHS specialist alcohol service whose family members were recruited through the non-statutory service, which meant that consent could not be sought to access NHS records for those individuals.

4.9.2. *Confounding Variables*

The male and female groups in this study were compared on the basis that each of them had a family member who was receiving treatment for an alcohol problem.

Aside from this commonality between participants no data was collected with regards to other potential commonalities or differences between participants. It is possible that the participants may have had variations in many domains, including, their social circumstances, education, and family background, all of which may have influenced their coping styles, attributions, expressed emotion, and mental health. The study did not ask caregivers about existing mental health problems, although those who were also being treated at the NHS specialist alcohol service were excluded from the study.

In terms of information relating to the person with the drinking problem, no data was collected relating to the severity and chronicity of the alcohol problem, which could have impacted on their relationship with the study participant. It is also acknowledged that participants comprised family members of any patients of the NHS specialist alcohol service, yet it is not known at what stage of treatment the patients were at, or how long they had been patients of the service. This factor could potentially be influential on the coping behaviours of family members involved in the process; however since it was predicted that recruitment of participants would be difficult with this population, it was not feasible to limit participants to those family members of patients who were at a specific point in treatment. Additionally, the design of the study was cross-sectional as opposed to longitudinal and since alcohol dependence is characterised by varying drinking behaviours over time, e.g. periods of abstinence and periods of relapse, it was felt that it would be futile to attempt to capture those caregivers of patients who were all at the same stage of treatment or drinking to the same level or intensity.

4.9.3. *Data Collection*

Whilst it was acknowledged in the methodology section that the recruitment of participants from the non-statutory service was ad-hoc in nature, therefore no specific demographic information was collected relating to location of recruitment, future research could examine the differences between caregivers who seek out support in their own right and those caregivers who don't. The groups demonstrated different variance on the measure of mental health, the GHQ-12. The analysis of this information was beyond the scope of this study and seemed futile without the aforementioned accompanying demographic information, however it could be an interesting area of exploration for future research into caregivers of people with alcohol problems.

The sample size of for the study was small, N = 55, and there were more female participants than males. In order to ensure as few confounding variables as possible within the data the inclusion criteria for the study were steadfastly applied. For this reason the population from which a sample could be extracted was also relatively small. The principal researcher had access to only one NHS specialist alcohol service and over the nine-month data collection period a sizeable sample was approached. The principal researcher acknowledged that since specialist alcohol services tend to see patients for extended periods of time and can have high rates of re-referral into the service, the pool of potential participants would be limited. As previously stated in the methodology section, many patients of the service who were approached by the principal researcher reported a variety of reasons why they could not consider inviting family members to participate in the study. These reasons included: lack of contact with family members, family members having no knowledge of the alcohol problem,

and not wanting to burden any further those family members who already offered support to the person with the problem. Some patients also attended outpatient appointments with paid support workers, who did not meet the inclusion criteria for the study.

4.9.4. *External validity*

Caution should be taken when attempting to generalise findings from one study to a larger population (Dennis *et al.,* 2000). It is difficult to say whether the findings of this study could be generalised to all male and female caregivers of people with alcohol problems. In the first instance, the findings would be restricted to those caregivers whose family member is receiving treatment for the problem. As mentioned in the methodologies section, a proportion of patients declined to have their family members approached about the study for a variety of reasons. It is possible that this group of caregivers may have had different outcomes from those included in the study, and although it is conjecture, the nature of the relationship with the person with the problem may have been more collaborative or co-operative.

Since the sample of participants was self-selected it is possible that they represented a particular category of caregivers; however, for ethical and practical reasons, it was not possible to gather information relating to those who chose not to participate in the study, therefore it is not known whether the sample studied was representative of caregivers and family members of patients attending the NHS specialist alcohol service. The external validity of the study could have been improved if it were possible to approach every family member concerned; however since the principal researcher met with each participant to conduct the research this seemed to be an

impracticable option. Clark-Carter (1997) stated that an alternate method for improving the external validity of a study is to include a control group. Had the measures used in the study been administered to a sample of non-caregiving males and females it would be expected that their scores would differ to those of the participant groups in this study, thus increasing the validity of conclusions relating to the mental health, coping skills, expressed emotion, and attributions of caregivers of people with alcohol problems. Such methodologies could be included in future research in this area.

4.9.5. *Measures*

Completion of the Causal Dimensions Scale required participants to provide the main reason for the alcohol problem of their family member. Participants were then required to complete the questionnaire, answering the questions in relation to the cause of the alcohol problem, not the alcohol problem itself. A possible conceptual error could have occurred, as it is conceivable that participants could make entirely different attributions about the causes of the alcohol problem as opposed to the alcohol problem itself. Depression was the most frequently cited reason for the cause of the alcohol problem within the male caregiver group. It is possible that the depression could be rated as internal, stable, and controllable, however had the participant been asked to make attributions relating to the resulting alcohol problem, these could have been external, unstable, and uncontrollable. In future research of this nature an alternative measure of attributions may be more appropriate to guard against conceptual errors of this nature.

The Family Attitude Scale (FAS; Kavanagh *et al.,* 1997) was chosen as a measure of expressed emotion over the "gold-standard measure" (Hooley & Parker, 2006, p.387), the Camberwell Family Interview (CFI; Vaughn & Leff, 1976b) for a variety of practical reasons. The CFI is conducted with relatives of a patient, without the patient being present. The interview can last for between 1 and 2 hours and a CFI interview can only be conducted following 40 to 80 hours of formal training. Hooley and Parker (2006) reported that this type of training is expensive and difficult to access. Once the interview has been conducted, coding the information can take a further 2 to 3 hours. In the current research, resources were not available to seek training in the administration and coding of the CFI. Also the time limited nature of the current research did not allow for such lengthy measures to be used with the number of participants recruited.

4.9.6. *Future Research*

Although beyond the scope of the current study, future potential research areas in this field should include, comparing caregivers of people with alcohol problems who are engaged in treatment services with those who are not. Philpott and Christie (2008) and Orford *et al.* (2005) posited that engaged coping may be more prevalent amongst caregivers of people who are contemplating change or who are involved in treatment; therefore the prevalence of engaged coping found within this sample may not be representative of all caregivers of people with alcohol problems.

The current study highlighted a relationship between tolerant-inactive coping and high expressed emotion for both male and female caregivers. Since high expressed emotion has previously been found to be linked to relapse in alcohol problems (Fichter *et al.,*

1997; O'Farrell *et al.,* 1998), future research could examine this relationship further to determine whether interventions focused on reducing tolerant-inactive coping also reduce the levels of expressed emotion, thus having a positive effect on both the person with the problem as well as the caregiver.

Whilst correlational analysis was carried out to examine any potential relationships between variables for both genders, the analysis did not attempt to examine the causality of these relationships. Since the data was cross-sectional and therefore reflected a snap shot of the current coping, expressed emotion, attributions, and mental health of the participant, it was felt that longitudinal data would be required to assess the causal relationships between these variables. The data suggested that tolerant-inactive coping, as measured by the Coping Questionnaire, may be related to the levels of expressed emotion for both male and female caregivers of people with alcohol problems. The findings of the current study also demonstrated that attributions made by caregivers may also influence their mental health outcomes. The nature of these relationships could be considered in future longitudinal research, with the aim of developing a model of the factors associated with mental health problems for caregivers of people with alcohol problems and the causal links between these factors.

SUMMARY

The study found that female caregivers of people with alcohol problems have significantly poorer mental health outcomes than male caregivers, a finding that has been reported for caregivers of people with other mental health problems, including Alzheimer's disease and Bipolar Disorder (Goossens *et al.,* 2008; Parks & Pilisuk, 1991). Sixty percent of the females in this sample reached the cut-off for possible mental illness, as measured by the GHQ-12, which suggests that mental health clinicians both within and out with specialist alcohol services should enquire about the mental health of caregivers of people with alcohol problems, particularly females, to ensure timely intervention is offered. For female caregivers the use of tolerant-inactive coping and engaged coping were associated with poorer mental health. For male caregivers a relationship was found between poorer mental health and making attributions of controllability about the alcohol problem of a family member. Controllable attributions in the male caregiver group were also associated with high expressed emotion for this group. This finding offers some support for Hooley's (1987) theory, which stated that high expressed emotion in caregivers may be caused by attempts by caregivers to control a problem situation which is uncontrollable.

The study also found that both males and females frequently utilise coping strategies which have been found to be associated with poor mental health, i.e. engaged coping and tolerant-inactive coping. For both genders, tolerant-inactive coping was also associated with higher levels of expressed emotion. The consequences of this relationship for both the caregiver and the person with the alcohol problem could be detrimental, since high expressed emotion has been found to be associated with relapse to alcohol use for the person with the problem (Fichter *et al.,* 1997; O'Farrell

et al., 1998) and tolerant-inactive coping is associated with poor mental and physical health for the caregiver (Orford *et al.,* 2001). Whilst there was no direct relationship found between expressed emotion and mental health outcomes for caregivers, the overall findings would suggest that coping skills and mental health for caregivers of people with alcohol problems are influenced by other factors including attributions and expressed emotion and that these influencing factors differ for males and females.

REFERENCES

Bandura, A. (1969). *Principles of Behaviour Modification.* New York: Holt, Rinehart & Winston.

Bandura, A. (1977). Self efficacy: Toward a unifying theory of behavioural change. *Psychological Review,* 84, 191-215.

Barber, J.G., & Crisp, B.R. (1995). The 'pressures to change' approach to working with the partners of heavy drinkers. *Addiction,* 90, 269-276.

Barrowclough, C., & Hooley, J.M. (2003). Attributions and expressed emotion: A review. *Clinical Psychology Review,* 23, 849-880.

Barrowclough, C., Ward, J., Wearden, A., & Gregg, L. (2005). Expressed emotion and attributions in relatives of schizophrenia patients with and without substance misuse. *Social Psychiatry and Psychiatric Epidemiology,* 40, 884-891.

Baumgarten, M., Battista, R.N., Infante-Rivard, C., Hanley, J.A., Becker, R., & Gauthier, S. (1992). The psychological and physical health of family members caring for an elderly person with dementia. *Journal of Clinical Epidemiology,* 45, 61-70.

Brennan, P.L., Moos, R.H., Kelly, K.M. (1994). Spouses of late-life problem drinkers: Functioning, coping responses, and family contexts. *Journal of Family Psychology,* 8(4), 447-457

Brown, G.W., Monck, E.M., Carstairs, G.M., & Wing, J.K. (1962). The influence of family life on the course of schizophrenic illness. *British Journal of Preventative Social Medicine,* 16, 55-68.

Brown S., Barrowclough B., & Inskip H. (2000). Causes of the excess mortality of schizophrenia. *British Journal of Psychiatry* 177, 212–217

Butzlaff, R.L., & Hooley, J.M. (1998). Expressed emotion and psychiatric relapse: A meta-analysis. *Archives of General Psychiatry,* 55, 547-552.

Cabinet Office Strategy Unit (2003) *Alcohol Misuse: how much does it cost?*

Caprari, G.V., Pastorelli, C., & Weiner, B. (1997). Linkages between causal ascriptions, emotion, and behaviour. *International Journal of Behavioural Development,* 20(1), 153-162.

Clark, R.E. (2001). Family Support and substance use outcomes for persons with mental illness and substance use disorders. *Schizophrenia Bulletin,* 27, 93-102.

Collins, R.L. (1990). Family treatment of alcohol abuse: Behavioural and systems perspectives. In R.L. Collins, K.E. Leonard, & J.S. Searles (Eds.), *Alcohol and the family: Research and clinical perspectives* (pp.285-308). New York: Guilford Press.

Copello, A., & Orford, J. (2002). Addiction and the family: is it time for services to take notice of the evidence? *Addiction,* 97, 1361-1363.

Copello, A., Orford, J., Velleman, R., Templeton, L., & Krishnan, M. (2000). Methods for reducing alcohol and drug related family harm in non-specialist settings. *Journal of Mental Health,* 9(3), 329-343.

Copello, A., Templeton, L., Krishnan, M., Orford, J., & Velleman, R. (2000). A treatment package to improve primary care services for relatives of people with alcohol and drug problems. *Addiction Research,* 8(5), 471-484.

Dawson, D.A. (2000). Alcohol consumption, alcohol dependence and all-cause mortality. *Alcoholism Clinical and Experimental Research,* 24, 72-81.

Dennis, M.L., Perl, H.I., Huebner, R.B., & McLellan, A.T. (2000). Twenty-five strategies for improving the design, implementation and analysis of health services research related to alcohol and other drug abuse treatment. *Addiction,* 95 (Suppl. 3), S281 – S308.

Draper, B.M., Poulos, C.J., Cole, A.D., Poulos, R.G., & Ehrlich, F. (1992). A comparison of caregivers for elderly stroke and dementia victims. *Journal of the American Geriatrics Society,* 40, 896-901.

Dura, J.R., Stukenberg, K.W., & Kiecolt-Glaser, J.K. (1990). Spousal caregivers of persons with Alzheimer's disease and Parkinson's disease dementia. *Gerontologist,* 30, 332-336.

Dyck, D., Short, R., & Vitaliano, P. (1999) Predictors of burden and infectious illness in schizophrenia caregivers. *Psychosomatic Medicine,* 61, 411-419.

Ellis, A. (1962). *Reason and emotion in psychotherapy.* Secaucus, NJ: Lyle Stuart.

Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments, & Computers*, *28*, 1-11.

Fadden, G., Mansell, C., & Cox, S. (2007). Training programme for families and friends of people experiencing difficulties relating to alcohol and/or drug misuse. Birmingham: The Meriden Programme.

Fichter, M.M., Glynn, S.M., Weyerer, S., Liberman, R.P., & Frick, U. (1997). Family climate and expressed emotion in the course of alcoholism. *Family Process*, 36, 203-221.

French, D.J., & Tait, R.J. (2004). Measurement of invariance in the General Health Questionnaire-12 in young Australian adolescents. *European Child and Adolescent Psychiatry,* 13, 1-7.

Fuller-Jonap, F., & Haley, W.E. (1995) Mental and physical health of male caregivers of a spouse with Alzheimer's disease. *Journal of Aging and Health,* 7, 99-118.

Goldberg, D.P. (1972). *The detection of psychiatric illness by questionnaire* (Maudsley Monograph No. 21). Oxford, England: Oxford University Press.

Goldberg, D.P., Gater, R., Sartorius, N., Ustun, T.B., Piccinelli, M., Gureje, O., *et al.* (1997). The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychological Medicine,* 27(1), 191-197.

Goldberg, D.P., Gater, R., Sartorius, N., Ustun, T.B., Piccinelli, Gureje, O., *et al.* (1997). The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychological Medicine,* 27(1), 191-197.

Goldberg, D.P., & Williams, P. (1988). *A user's guide to the general health questionnaire.* London: NFER-Nelson.

Goossens, P.J.J., Van Wijngaarden, B., Knoppert-Van Der Klein, E.A.M., & Van Achterberg, T. (2008). Family caregiving in bipolar disorder: caregiver consequences, caregiver coping styles, and caregiver distress. *International Journal of Social Psychiatry,* 54(4), 303-316.

Grad, J., & Sainsbury, P. (1968). The effects that patients have on their families in a community care and a control psychiatric service – A two year follow-up. *British Journal of Psychiatry,* 114, 265-278.

Graetz, B. (1991). Multidimensional properties of the General Health Questionnaire. *Social Psychiatry and Psychiatric Epidemiology,* 26, 132-138.

Green, S.B. (1991). How many subjects does it take to do a regression analysis? *Multivariate Behavioural Research,* 26, 499-510.

Guido, M., Brady, W., & DeBehnke, D. (1994). Reversible neurological deficits in a chronic alcohol abuser: A case report of Wernicke's Encephalopathy. *American Journal of Emergency Medicine,* 12(2), 238-240.

Gutierrez-Maldonado, J., Caqueo-Urizar, A., & Kavanagh, D.J. (2005). Burden of care and general health in families of patients with schizophrenia. *Social Psychiatry and Psychiatric Epidemiology,* 40, 899-904.

Halford, W.K., Price, J., Kelly, A.B., Bouma, R., & Young, R.M. (2001). Helping female partners of men abusing alcohol: A comparison of three treatments. *Addiction,* 96, 1497-1508.

Hooley, J.M. (1985). Expressed emotion: A review of the critical literature. *Clinical Psychology Review,* 5, 119-339.

Hooley, J.M. (1987). The nature and origins of expressed emotion. In M.J. Goldstein & K Hahlweg (Eds.), *Understanding major mental disorder: The contribution of family interaction research* (pp. 176-194). New York: Family Process Press.

Hooley, J.M., & Hiller, J.B. (2000). Personality and expressed emotion. *Journal of Abnormal Psychology,* 109 (1), 40-44.

Hooley, J.M., & Licht, D.M. (1997). Expressed emotion and causal attributions in the spouses of depressed patients. *Journal of Abnormal Psychology,* 106(2), 298-306.

Hooley, J.M., Orley, J., & Teasdale, J.D. (1986). Levels of expressed emotion and relapse in depressed patients. *British Journal of Psychiatry,* 148, 642-647.

Hooley, J.M., Richters, J.E., Weintraub, S., & Neale, J.M. (1987). Psychopathology and marital distress: The positive side of positive symptoms. *Journal of Abnormal Psychology,* 96, 27-33.

Howells, E. & Orford, J. (2006) Coping with a problem drinker: a therapeutic intervention for the partners of problem drinkers in their own right. *Journal of Substance Use,* 11(1), 53-71

Hurcom, C.A., Copello, A., & Orford, J. (1999). An exploratory study of the predictors of coping and psychological well-being in female partners of excessive drinkers. *Behavioural and Cognitive Psychotherapy,* 27, 311-327.

Jellinek, E. M. (1960) *The Disease Concept of Alcoholism*, Hillhouse, New Haven.

Kaufman, E. (1985). Family therapy in the treatment of alcoholism. In E.T. Bratter & G.G. Forrest (Eds.), *Alcoholism and Substance Abuse: Strategies for Clinical Intervention* (pp. 376-397). New York: Free Press.

Kavanagh, D.J. (1992). Recent developments in expressed emotion in schizophrenia. *British Journal of Psychiatry,* 160, 601-620.

Kavanagh, D.J., O'Halloran, P., Manicavasagar, V., Clark, D., Piatkowska, O., Tennant, C., *et al.* (1997). The family attitude scale: reliability and validity of a new scale for measuring the emotional climate in families. *Psychiatry Research,* 70, 185-195.

Kavanagh, D.J., Pourmand, D., White, A., Robertson, D., Halford, K., & Vaughan, K. (2008). Predictive valildity of the Family Attitude Scale in people with psychosis. *Psychiatry Research,* 160(3), 356-363.

Kellett, S. (2002). *Causal attributions for problem drinking: Gender differences and predictors of therapeutic outcome.* Unpublished doctorate thesis, University of Leicester.

Kellner, R. & Sheffield, B. (1973). A self-rating scale of distress. *Psychological Medicine,* 3, 88-100.

Kinney, J. M., Stephens, M. P., Franks, M. M., & Norris, V. K. (1995). Stress and satisfaction of family caregivers to older stroke patients. *Journal of Applied Gerontology,* 14, 3–21.

Kushner, M.G., Abrams, K., Thuras, P., Hanson, K.L., Brekke, M., & Sletten, S. (2005). Follow-up study of anxiety disorder and alcohol dependence in comorbid alcoholism treatment patients. *Alcoholism: Clinical and Experimental Research,* 29(8), 1432-1443.

Lutzy, S.M., & Knight, B.G. (1994). Explaining gender differences in caregiver distress: The roles of emotional attentiveness and coping styles. *Psychology and Aging,* 9(4), 513-519.

Maisto, S.A., O'Farrell, T.J., McKay, J.R., Connors, G.J., Pelcovits, M. (1988). Alcoholic and spouse concordance on attributions about relapse to drinking. *Journal of Substance Abuse Treatment,* 5, 179-181.

Mäkikangas, A., Feldt, T., Kinnunen, U., Tolvanen, A., Kinnunen, M-L., & Pulkkinen, L. (2006). The factor structure and factorial invariance of the 12-item general health questionnaire (GHQ-12) across time: Evidence from two community-based samples. *Psychological Assessment,* 18(4), 444-451.

McAuley, E., Duncan, T.E., & Russell, D.W. (1992). Measuring causal attributions: the revised Causal Dimensions Scale (CDSH). *Personality and Social Psychology Bulletin,* 18, 566-573.

McLellan, A.T., Lewis, D.C., O'Brien, C.P., & Kleber, H.D. (2000). Drug Dependence, a Chronic Medical Illness: Implications for Treatment, Insurance, and Outcomes Evaluation. *The Journal of the American Medical Association,* 284(13), 1689-1695

Meyers, R.J., Miller, W.R., Hill, D.E., & Tonigan, J.S. (1998). Community reinforcement and family training (CRAFT): engaging unmotivated drug users in treatment. *Journal of Substance Abuse,* 10(3), 291-308

Miller, W.R. (2003). A collaborative approach to working with families. *Addiction,* 98, 5-6.

Miller, B., & Cafasso, L. (1992). Gender differences in caregiving: Fact or artifact. *The Gerontologist,* 32(4), 498-507.

Miller, W.M., Meyers, R.J., & Tonigan, J.S. (1999). Engaging the unmotivated in treatment for alcohol problems: A comparison of three strategies for intervention through family members. *Journal of Consulting and Clinical Psychology,* 67(5), 688-697.

Miller, W. & Willbourne, P. (2002). Mesa Grande: a methodological analysis of clinical trials of treatments for alcohol use disorders. *Addiction,* 97, 265-277.

Miklowitz, D.J., Goldstein, M.J., Nuechterlein, K.H., Synder, K.S., & Mintz, J. (1988). Family factors and the course of bipolar affective disorder. *Archives of General Psychiatry,* 45, 225-231.

Moos, R.H. (1993). *The Coping Responses Inventory Adult Form manual.* Odessa, FL: Psychological Assessment Resources.

Moos, R.H., Cronkite, R.C., & Finney, J.W. (1990). *Health and Daily Living Form manual.* Palo Alto, CA: Consulting Psychologists Press.

Moos, R.H., Finney, J.W., & Cronkite, R.C. (1990). *Alcoholism treatment: Context, process, and outcome.* New York: Oxford University Press.

Morse, R.M. & Flavin, D.K. (1992). The definition of alcoholism. The joint committee of the national council on alcoholism and drug dependence and the American society of addiction medicine to study the definition and criteria for the diagnosis of alcoholism. *The Journal of the American Medical Association,* 268(8), 1012-1014

National Institute on Alcohol Abuse and Alcoholism (NIAAA; 2000). Health risks and benefits of alcohol consumption. *Alcohol Research and Health,* 24(1), 5-11

Navaie-Waliser, M., Spriggs, A., & Feldman, P.H. (2002). Informal caregiving. Differential experiences by gender. *Medical Care,* 40(12), 1249-1259.

Niv, N., Lopez, S.R., Glynn, S.M., Mueser, K. (2007). The role of substance misuse in families' attributions and affective reactions to their relative with severe mental illness. *The Journal of Nervous and Mental Disease,* 195(4), 307-314.

Oldridge, M., & Hughes, I. (1992). Psychological well-being in families with a member suffering from schizophrenia. An investigation into long-standing problems. *British Journal of Psychiatry,* 161, 249-251.

Orford, J. (1996). *Coping Questionnaire.* School of Psychology, The University of Birmingham.

Orford, J. (1998). The Coping Perspective. In Velleman, R., Copello, A., & Maslin, J. (Eds) *Living with drink: Women who live with problem drinkers,* Ch. 12, pp. 128-149. London: Longman

Orford, J. & Edwards, G. (1977). *Alcoholism, Institute of Psychiatry, Maudsley Monographs, No. 26.* Oxford University Press.

Orford, J., Guthrie, S., Nicholls, P., Oppenheimer, E., Egert, S., & Hensman, C. (1975). Self-reported coping behaviour of wives of alcoholics and its association with drinking outcome. *Journal of Studies on Alcohol,* 36, 1254-1267.

Orford, J., Natera, G., Davies, J., Nava, A., Mora, J., Rigby, K., *et al.* (1998). Tolerate, engage, or withdraw: A study of the structure of families coping with alcohol and drug problems in South West England and Mexico City. *Addiction,* 93(12) 1799-1813.

Orford, J., Natera, G., Velleman, R., Copello, A., Bowie, N., Bradbury, C., *et al.* (2001). Ways of coping and the health of relatives facing drug and alcohol problems in Mexico and England. *Addiction,* 96, 761-774.

Orford, J., Rigby, K., Miller, T., Tod, A., Bennett, G., & Velleman, R. (1992). Ways of coping with excessive drug use in the family: A provisional typology based on the accounts of 50 close relatives. *Journal of Community and Applied Social Psychology,* 2, 163-183.

Orford, J., Templeton, L., Velleman, R., & Copello, A. (2005). Family members of relatives with alcohol, drug and gambling problems: a set of standardized questionnaires for assessing stress, coping and strain. *Addiction*, 100, 1611-1624.

Orford, J., Oppenheimer, E., Egert, S., Hensman, C., & Guthrie, S. (1976). The cohesiveness of alcoholism-complicated marriages and its influence on treatment outcomes. *British Journal of Psychiatry,* 128, 318-339.

O'Farrell, T.J., & Bayog, R.D. (1986). Antabuse contracts for married alcoholics and their spouses: A method to maintain Antabuse ingestion and decrease conflict about drinking. *Journal of Substance Abuse Treatment,* 3, 1-8.

O'Farrell, T.J., Hooley, J., Fals-Stewart, W., & Cutter, H.S.G. (1998). Expressed emotion and relapse in alcoholic patients. *Journal of Counselling and Clinical Psychology,* 66(5), 744-752.

Parks, S.H. & Pilisuk, M. (1991). Caregiver burden: Gender and the psychological costs of caregiving. *American Journal of Orthopsychiatry,* 61(4), 501-509.

Perlick, D.A., Hohenstein, J.M., Clarkin, J.F., Kaczynski, R., & Rosenheck, R.A. (2005). Use of mental health and primary care services by caregivers of patients with bipolar disorder: A preliminary study. *Bipolar Disorders*, 7, 126-135.

Philpott, H., & Christie, M.M. (2008). Coping in male partners of female problem drinkers. *Journal of Substance Use,* 13(3), 193-203.

Piliavin, I. M., Rodin, J., & Piliavin, J. A. (1969). Good Samaritanism: An underground phenomenon? *Journal of Personality and Social Psychology*, 13, 289-299. Cited in Weiner, B. (1980). A cognitive (attribution)-emotion-action model of motivated behaviour: an analysis of judgements of help giving. *Journal of Personality and Social Psychology,* 39, 186-200.

Pinquart, M., & Sörensen, S. (2003). Differences between caregivers and noncaregivers in psychological health and physical health: A meta analysis. *Psychology and Aging*, 18(2), 250-267.

Ries, J.K. (1977). Public acceptance of the disease concept of alcoholism. *Journal of Health and Social Behaviour,* 18, 338-344.

Rivers, P.C., Sarata, B.P., Anagnostopulos, M. (1986). Perceptions of deviant stereotypes by alcoholism, mental health, and school personnel in New Zealand and the United States. *International Journal of Addictions,* 21, 123-129.

Roberts, K.S. & Brent, E.E. (1982). Physician utilisation and illness patterns in families of alcoholics. *Journal of Studies on Alcohol,* 43, 119-128.

Roussi, P. (2002). Discriminative facility in perceptions of control and its relation to psychological distress. *Anxiety, Stress, and Coping,* 15(2), 179-191.

Russell, D. (1982). The Causal Dimension Scale: A measure of how individuals perceive causes. *Journal of Personality and Social Psychology,* 42(6), 1137-1145.

SAMH (2006). *Recovering from alcohol related brain damage: Looking forward.* Australia; Arbias Ltd.

Schneider, J., Murray, J., Banerjee, S., & Mann, A. (1999). Eurocare: A cross-national study of co-resident spouse carers for people with Alzheimer's disease: I-factors associated with carer burden. *International Journal of Geriatric Psychiatry,* 14, 651-661.

Schreurs, P.J.G., van de Willige, G., Brosschot, J.F., Tellegen, B., & Graus, G.M.H. (1993). *The Utrecht Coping List.* Amsterdam: Harcourt Assessment B.V.

Scottish Government (2005). *Scottish Health Survey 2003.* h*ttp://www.scotland.gov.uk/Publications/2005/12/02160336/03417*

Scottish Government. (2008). *Changing Scotland's relationship with alcohol: a discussion paper on our strategic approach.* www.scotland.gov.uk/Publications/2008/06/16084348/16

Scottish Intercollegiate Guidelines Network (2003). *The management of harmful drinking and alcohol dependence in primary care.* http://www.sign.ac.uk/pdf/sign74.pdf

Svenson, L.W., Forster, D.I., Woodhead, S.E., & Platt, G.H. (1995). Individuals with a chemical-dependent family member. Does their health care use increase? *Canadian Family Physician,* 41, 1488-1493

Szmukler, G.I., Eisler, I., Russell, F.M., & Dare, C. (1985). Anorexia nervosa, parental expressed emotion and dropping out of treatment. *British Journal of Psychiatry,* 147, 265-271.

Tarrier, N., Barrowclough, C., Ward, J., Donaldson, C., Burns, A., & Gregg, L. (2002). Expressed emotion and attributions in the carers of patients with Alzheimer's disease: The effect of carer burden. *Journal of Abnormal Psychology,* 111(2), 340-349.

Turner, R.J., & Avison, W.R. (1989). Gender and depression. Assessing exposure and vulnerability to life events in a chronically strained population. *Journal of Nervous and Mental Disease,* 177, 442-456.

Ukpong, D.I. (2006). Demographic factors and clinical correlates of burden and distress in relatives of service users experiencing schizophrenia: A study from south-western Nigeria. *International Journal of Mental Health Nursing,* 15, 54-59.

Vaughn, C.E., & Leff, J.P. (1976a). The influence of family and social factors on the course of psychiatric illness: A comparison of schizophrenic and depressed neurotic patients. *British Journal of Psychiatry,* 129, 125-137.

Vaughn, C.E., & Leff, J.P. (1976b). The measurement of expressed emotion in the families of psychiatric patients. *British Journal of Social and Clinical Psychology,* 15, 157-165.

Waldemar G, Dubois B, Emre M, Georges, J., McKeith, I.G., Rossor, M., *et al.* (2007). Recommendations for the diagnosis and management of Alzheimer's disease and other disorders associated with dementia: EFNS guideline. *European Journal of Neurology,* 14(1), 1–26.

Wearden, A.J., Tarrier, N., Barrowclough, C., Zastowny, T.R., & Cahill, A.A. (2000). A review of expressed emotion research in health care. *Clinical Psychology Review,* 20(5), 633-666.

Weiner, B. (1979). A theory of motivation for some classroom experiences. *Journal of Educational Psychology,* 71, 3-25.

Weiner, B. (1980). A cognitive (attribution)-emotion-action model of motivated behaviour: an analysis of judgements of help giving. *Journal of Personality and Social Psychology,* 39, 186-200.

Weiner, B. (1995). *Inferences of Responsibility: A Foundation for a Theory of Social Conduct.* New York: Guilford Press.

West, G.E., & Simmons, R.L. (1983). Sex differences in stress, coping resources, and illness among the elderly. *Research on Aging,* 5, 235-268.

Wijngaarden, B.V., Schene, A.H., & Koeter, M.W.J. (2002). Caregiver consequences in the Netherlands and other European countries: The development and use of the Involvement Evaluation Questionnaire (IEQ). In *Family Interventions in mental illness: International perspectives* (Eds. H.P. Lefley, & D.L. Johnson), pp. 145-169. Westport, CT: Praeger Publishers.

World Health Organisation (1992). ICD-10: The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines. Geneva, WHO.

Yates, F.E. (1988). The evaluation of a "co-operative counselling" alcohol service which uses family and affected others to reach and influence problem drinkers. *British Journal of Addiction,* 83, 1309-1319.

APPENDIX A: The General Health Questionnaire (GHQ-12)

General Health Questionnaire (GHQ-12; Goldberg 1978)

Name:.....Date:.....

Please read this carefully.

We should like to know if you have had any medical complaints and how your health has been in general, over the past few weeks. Please answer ALL questions simply by underlining the answer which you think most nearly applies to you. Remember that we want to know about present and recent complaints, not those that you had in the past.

It is important that you try to answer ALL the questions.

Thank you very much for you co-operation.

Have you recently. . .

1. been able to concentrate on whatever you're doing?	Better than usual	Same as usual	Less than usual	Much less than usual
2. lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
3. felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
4. felt capable of making decisions about things?	More so than usual	Same as usual	Less so than usual	Much less capable
5. felt constantly under strain	Not at all	No more than usual	Rather more than usual	Much more than usual
6. felt you couldn't overcome your difficulties	Not at all	No more than usual	Rather more than usual	Much more than usual
7. been able to enjoy your normal day-to-day activites?	More so than usual	Same as usual	Less so than usual	Much less than usual
8. been able to face up to your problems?	More so than usual	Same as usual	Less able than usual	Much less able
9. been feeling unhappy and depressed?	Not at all	No more than usual	Rather more than usual	Much more than usual
10. been losing confidence in yourself?	Not at all	No more than usual	Rather more than usual	Much more than usual
11. been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
12. been feeling reasonably happy, all things considered?	More so than usual	About same as usual	Less so than usual	Much less than usual

APPENDIX B: Family Attitude Scale (FAS-30)

FAS-30

Here are some thoughts and feelings that family members may sometimes have about each other. Please be honest about your feelings. Your answers will be kept confidential.

Please say how often each statement is true of your relative *at the moment.* Write whether it is true *every day, most days, some days, very rarely* or *never* at the moment.

Look at the first item. How often is it good to have your relative around at the moment? *Circle your answer below.*

1. It is good to have him/her around	Every day	Most days	Some days	Very rarely	Never
2. He/she makes me feel drained	Every day	Most days	Some days	Very rarely	Never
3. He/she ignores my advice	Every day	Most days	Some days	Very rarely	Never
4. He/she is really hard to take	Every day	Most days	Some days	Very rarely	Never
5. I shout at him/her	Every day	Most days	Some days	Very rarely	Never
6. I wish he/she were not here	Every day	Most days	Some days	Very rarely	Never
7. I feel that he/she is driving me crazy	Every day	Most days	Some days	Very rarely	Never
8. I lose my temper with him/her	Every day	Most days	Some days	Very rarely	Never
9. He/she is easy to get along with	Every day	Most days	Some days	Very rarely	Never
10. I am sick of having to look after him/her	Every day	Most days	Some days	Very rarely	Never

11. He/she deliberately causes me problems	Every day	Most days	Some days	Very rarely	Never
12. I enjoy being with him/her	Every day	Most days	Some days	Very rarely	Never
13. He/she is a real burden	Every day	Most days	Some days	Very rarely	Never
14. I argue with him/her	Every day	Most days	Some days	Very rarely	Never
15. I feel very close to him/her	Every day	Most days	Some days	Very rarely	Never
16. I can cope with him/her	Every day	Most days	Some days	Very rarely	Never
17. Living with him/her is too much for me	Every day	Most days	Some days	Very rarely	Never
18. He/she is infuriating	Every day	Most days	Some days	Very rarely	Never
19. I find myself saying nasty or sarcastic things to him/her	Every day	Most days	Some days	Very rarely	Never
20. He/she appreciates what I do for him/her	Every day	Most days	Some days	Very rarely	Never
21. I feel that he/she is becoming easier to live with	Every day	Most days	Some days	Very rarely	Never
22. I wish he/she would leave me alone	Every day	Most days	Some days	Very rarely	Never
23. He/she takes me for granted	Every day	Most days	Some days	Very rarely	Never

24. He/she can control himself/herself	Every day	Most days	Some days	Very rarely	Never
25. He/she is hard to get close to	Every day	Most days	Some days	Very rarely	Never
26. I feel that he/she is becoming harder to live with	Every day	Most days	Some days	Very rarely	Never
27. I feel very frustrated with him/her	Every day	Most days	Some days	Very rarely	Never
28. He/she makes a lot of sense	Every day	Most days	Some days	Very rarely	Never
29. I feel disappointed with him/her	Every day	Most days	Some days	Very rarely	Never
30. He/she tries to get along with me	Every day	Most days	Some days	Very rarely	Never

APPENDIX C: Coping Questionnaire (Male version)

Coping Questionnaire (Orford et al 2005)

Have you recently (in the last 3 months)

1.	Refused to lend money or to help him out financially in other ways?	No	Once or twice	Sometimes Often
2.	Put the interests of other members of the family before his?	No	Once or twice	Sometimes Often
3.	Put yourself out for him, for example by getting him to bed or by clearing up mess after him after he had been drinking?	No	Once or twice	Sometimes Often
4.	Given him money even when you thought it would be spent on drink?	No	Once or twice	Sometimes Often
5.	Sat down together with him and talked frankly about what could be done about his drinking?	No	Once or twice	Sometimes Often
6.	Started an argument with him about his drinking?	No	Once or twice	Sometimes Often
7.	Pleaded with him about his consumption of alcohol?	No	Once or twice	Sometimes Often
8.	When he was under the influence of drink, left him alone to look after himself or kept out of his way?	No	Once or twice	Sometimes Often
9.	Made it quite clear to him that his drinking was causing you upset	No	Once or twice	Sometimes Often
10.	Felt too frightened to do anything?	No	Once or twice	Sometimes Often
11.	Tried to limit his drinking by making some rule about it, for example; forbidding drinking in the house, or stopping him bringing drinking friends home?	No	Once or twice	Sometimes Often
12.	Pursued your own interests or looked for new interests or occupations for yourself, or got more involved in a political, church, sports or other organisation?	No	Once or twice	Sometimes Often
13.	Encouraged him to take an oath or promise not to drink?	No	Once or twice	Sometimes Often
14.	Felt too hopeless to do anything?	No	Once or twice	Sometimes Often
15.	Avoided him as much as possible because of his drinking?	No	Once or twice	Sometimes Often
16.	Got moody or emotional with him?	No	Once or twice	Sometimes Often
17.	Watched his every move or checked up on him or kept a close eye on him?	No	Once or twice	Sometimes Often

18. Got on with your own things or acted as if he wasn't there?	No	Once Sometimes or twice	Often
19. Made it clear that you won't accept his reasons for drinking, or cover up for him?	No	Once Sometimes or twice	Often
20. Made threats that you didn't really mean to carry out?	No	Once Sometimes or twice	Often
21. Made clear to him your expectations of what he should do to contribute to the family?	No	Once Sometimes or twice	Often
22. Stuck up for him or stood by him when others were criticising him?	No	Once Sometimes or twice	Often
23. Got in a state where you didn't or couldn't make any decisions?	No	Once Sometimes or twice	Often
24. Accepted the situation as part of life that couldn't be changed?	No	Once Sometimes or twice	Often
25. Accused him of not loving you, or of letting you down?	No	Once Sometimes or twice	Often
26. Sat down with him to help him sort out the financial situation?	No	Once Sometimes or twice	Often
27. When things have happened as a result of his drinking, made excuses for him, covered up for him, or taken the blame yourself?	No	Once Sometimes or twice	Often
28. Searched for his drink or hidden or disposed of it yourself?	No	Once Sometimes or twice	Often
29. Sometimes put yourself first by looking after yourself or giving yourself treats?	No	Once Sometimes or twice	Often
30. Tried to keep things looking normal, pretended all was well when it wasn't or hidden the extent of his drinking?	No	Once Sometimes or twice	Often

APPENDIX D: Coping Questionnaire (Female version)

Coping Questionnaire (Orford et al 2005)

Have you recently (in the last 3 months)

1.	Refused to lend money or to help her out financially in other ways?	No	Once or twice	Sometimes Often
2.	Put the interests of other members of the family before hers?	No	Once or twice	Sometimes Often
3.	Put yourself out for her, for example by getting her to bed or by clearing up mess after her after she had been drinking?	No	Once or twice	Sometimes Often
4.	Given her money even when you thought it would be spent on drink?	No	Once or twice	Sometimes Often
5.	Sat down together with her and talked frankly about what could be done about her drinking?	No	Once or twice	Sometimes Often
6.	Started an argument with her about her drinking?	No	Once or twice	Sometimes Often
7.	Pleaded with her about her consumption of alcohol?	No	Once or twice	Sometimes Often
8.	When he was under the influence of drink, left her alone to look after herself or kept out of her way?	No	Once or twice	Sometimes Often
9.	Made it quite clear to her that her drinking was causing you upset	No	Once or twice	Sometimes Often
10.	Felt too frightened to do anything?	No	Once or twice	Sometimes Often
11.	Tried to limit her drinking by making some rule about it, for example; forbidding drinking in the house, or stopping her bringing drinking friends home?	No	Once or twice	Sometimes Often
12.	Pursued your own interests or looked for new interests or occupations for yourself, or got more involved in a political, church, sports or other organisation?	No	Once or twice	Sometimes Often
13.	Encouraged her to take an oath or promise not to drink?	No	Once or twice	Sometimes Often
14.	Felt too hopeless to do anything?	No	Once or twice	Sometimes Often
15.	Avoided her as much as possible because of her drinking?	No	Once or twice	Sometimes Often
16.	Got moody or emotional with her?	No	Once or twice	Sometimes Often
17.	Watched her every move or checked up on her or kept a close eye on her?	No	Once or twice	Sometimes Often

18. Got on with your own things or acted as if she wasn't there?	No	Once or twice Sometimes	Often
19. Made it clear that you won't accept her reasons for drinking, or cover up for her?	No	Once or twice Sometimes	Often
20. Made threats that you didn't really mean to carry out?	No	Once or twice Sometimes	Often
21. Made clear to her your expectations of what she should do to contribute to the family?	No	Once or twice Sometimes	Often
22. Stuck up for her or stood by her when others were criticising her?	No	Once or twice Sometimes	Often
23. Got in a state where you didn't or couldn't make any decisions?	No	Once or twice Sometimes	Often
24. Accepted the situation as part of life that couldn't be changed?	No	Once or twice Sometimes	Often
25. Accused her of not loving you, or of letting you down?	No	Once or twice Sometimes	Often
26. Sat down with her to help her sort out the financial situation?	No	Once or twice Sometimes	Often
27. When things have happened as a result of her drinking, made excuses for her, covered up for her, or taken the blame yourself?	No	Once or twice Sometimes	Often
28. Searched for her drink or hidden or disposed of it yourself?	No	Once or twice Sometimes	Often
29. Sometimes put yourself first by looking after yourself or giving yourself treats?	No	Once or twice Sometimes	Often
30. Tried to keep things looking normal, pretended all was well when it wasn't or hidden the extent of her drinking?	No	Once or twice Sometimes	Often

The Causal Dimensions Scale

Russell (1982)

People often believe there is a reason why other people drink too much. We are interested in your opinion about why a person close to you drinks.

What would you say is the main cause of this person's problem drinking?

.....

.....

Think about the cause (or reason) that you have written above. The items below concern how you feel about that cause.

Please read each question and circle one number to show how strongly you agree/disagree with the statements. Please answer all the questions.

1. Is the cause:

Something about the drinker	9	8	7	6	5	4	3	2 1 Something about others

2. Is the cause:

Controllable by the drinker or other people	9	8	7	6	5	4	3	2 1 Uncontrollable by the drinker or other people

3. Is the cause something that is:

Permanent	9	8	7	6	5	4	3	2 1 Temporary

4. Is the cause something:

Intended by the drinker or other people	9	8	7	6	5	4	3	2 1 Unintended by the drinker or other people

5. Is the cause something that is:

Inside of the drinker	9	8	7	6	5	4	3	2 1 Outside of the drinker

6. Is the cause something that is:

Stable over time	9	8	7	6	5	4	3	2 1 Variable over time

7. Is the cause something that:

Reflects an aspect of the drinker	9	8	7	6	5	4	3	2 1 Reflects an aspect of the situation

8. Is the cause something that is:

Unchangeable	9	8	7	6	5	4	3	2 1 Changeable

9. Is the cause something for which:

Someone is responsible	9	8	7	6	5	4	3	2 1 No one is responsible

APPENDIX F: Demographic forms

Section A. – About You

Please tick a box next to the answer that best applies to you.

1. **Gender:**

   Male ☐ **Female** ☐

2. **Your age:**

   Under 18 ☐ 45 to 54 ☐

   18 to 24 ☐ 55 to 64 ☐

   25 to 34 ☐ 65 and over ☐

   35 to 44 ☐

3. **What is your relationship to the drinker?**

   Parent ☐ Partner/spouse ☐

   Sibling ☐ Child ☐

   Other ☐

4. **Which of the following best describes you?**

   Employed/self-employed full-time ☐

   Employed/self-employed part-time ☐

   Unemployed ☐

   Full-time carer ☐

   (e.g. to your children or a dependant adult)

   Retired ☐

5. **How long do you feel that this person's drinking has been a problem?** (Put 0 if you don't feel that he/she has a problem)

   Years_____ **Months**_____

Section B. – The person with the alcohol problem

Please tick a box next to the answer that best applies.

1. **The person with the alcohol problem**

   Male ☐ **Female** ☐

2. **The age of the person with the alcohol problem:**

   Under 18 ☐
   18 to 24 ☐
   25 to 34 ☐
   35 to 44 ☐
   45 to 54 ☐
   55 to 64 ☐
   65 and over ☐

3. **Which of the following best describes the person with the alcohol problem?**

   Employed/self-employed full-time ☐
   Employed/self-employed part-time ☐
   Unemployed ☐
   Full-time carer ☐
   (e.g. to a children or a dependant adult)
   Retired ☐

Thank you for taking the time to fill in this questionnaire.
If you have any other comments you would like to make, please use the back of this questionnaire.

Participant Information Sheet – Client

Title of study: The differences between genders: a study of attitudes and perceptions of carers of people with alcohol problems.

You are being invited to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please contact XXXX XXXXXXXXXX, Trainee Clinical Psychologist, (XXXX XXXXXXX) if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to participate.

Thank you for taking the time to read this.

Purpose of the study

The study aims to investigate the experiences of male and female carers of people with alcohol problems. Past research has shown that male and female carers cope with difficulties and problems in different ways. This study aims to look specifically at how the coping skills, mental health, and perceptions of male and female carers of people with alcohol problems.

Why have I been chosen?

You are currently receiving support from the Alcohol Problems Service (APS) and may also have a family member/carer who is offering support to you at this time. The researcher is hoping to contact the family members/carers of approximately 70 people who are receiving support from the APS.

Do I have to take part?

Participation in this study is entirely voluntary and you can decide whether or not you wish to take part. If you decide **not** to take part, this decision will not affect any treatment or standard of care you receive from NHS Lothian in any way. If you decide you would like to take part, you will be asked to sign a consent form; once you have signed this you are still free to withdraw at any time.

What will happen if I agree to take part?

Should you decide to take part you will be asked to sign a consent form giving the researcher permission to contact a family member, specified by you. That family member will then be asked if he/she wishes to take part in the study. Any information provided will be

treated as confidential and any identifying information will be anonymised. Your name will not be recorded, nor will your participation in this study be recorded in your medical records.

What will happen to the results of this study?

The results of this study will be submitted to the University of Edinburgh in part fulfilment of the researchers' doctorate in Clinical Psychology. The results will also be disseminated at a local level within NHS Lothian and may be submitted for publication in an academic journal or presented at relevant conferences. All the data collected during this study will be anonymous and no identifying information regarding participants will be included. Therefore, it will not be possible for anybody to identify your involvement. You will be provided with a summary report of the results of the study once the study has been completed.

Further information

If you require further information about this study, or have any questions or concerns, you can contact the researcher, XXXX XXXXXXXXX (Trainee Clinical Psychologist) on telephone number XXXXXXXXXX

Participant Information Sheet

Title of study: The differences between genders: a study of the coping skills, mental health, and perceptions of carers of people with alcohol problems.

You have been asked to participate in the above research study. Before you decide whether or not you wish to take part, it is important for you to understand why the research is being undertaken and what it will involve. Please take time to read the following information carefully. You may decide to discuss it with others. If there is anything that is unclear, or if you would like more information, please do not hesitate to ask the researcher, XXXX XXXXXXXXX, Trainee Clinical Psychologist (XXXXXXXX). Take time to decide whether or not you wish to participate.

Thank you for taking the time to read this.

Purpose of the study

The study aims to investigate the experiences of male and female carers/family members of people with alcohol problems. Past research has shown that male and female carers cope with difficulties and problems in different ways. This study aims to look specifically at the coping skills, mental health and perceptions of male and female carers of people with alcohol problems.

Why have I been chosen?

This research is hoping to meet with approximately 70 carers/family members of people with alcohol problems, who are being treated at the Alcohol Problems Service, in order to complete a series of questionnaires.

Do I have to take part?

Participation in this study is entirely voluntary and you can decide whether or not you wish to take part. If you decide **not** to take part, this decision will not affect any treatment or standard of care you or your family member receive from NHS Lothian in any way. If you decide you would like to take part, you will be asked to sign a consent form; once you have signed this you are still free to withdraw at any time.

What will happen if I agree to take part?

The researcher will arrange a time to meet with you to administer a series of questionnaires about your attitudes, experiences and wellbeing. This should take approximately 15-20 minutes. Completing the measures will involve thinking about your experiences of dealing with a person with an alcohol problem, so it is possible that you **may** find some questions

sensitive and/or upsetting – if you do feel uncomfortable you will be able to take a break or discontinue. Should you agree to participate in the study, your GP will be sent a short letter informing him/her about your involvement in the study.

Will my responses be confidential?

Yes. All the information you provide will be kept confidential. The questionnaires will be anonymous so your name will not appear on any of your responses, and they will not be entered into your medical notes.

What will happen to the results of this study?

The results of this study will be submitted to the University of Edinburgh in part fulfilment of the researchers' doctorate in Clinical Psychology. The results will also be disseminated at a local level within NHS Lothian and may be submitted for publication in an academic journal or presented at relevant conferences. All the data collected during this study will be anonymous and no identifying information regarding participants will be included. Therefore, it will not be possible for anybody to identify your involvement. You will be provided with a summary report of the results of the study once the study has been completed.

Further information

If you require further information about this study, or have any questions or concerns, you can contact the researcher, XXXX XXXXXXXXX (Trainee Clinical Psychologist) on telephone number XXXX XXXXXX

APPENDIX I: Consent form

CONSENT FORM

Title of study: An exploration of gender differences in attitudes and perceptions of carers of people with alcohol problems

Researchers:

XXXX XXXXXXXXXX (Trainee Clinical Psychologist, NHS XXXXXXX)

1. I confirm that I have read and understand the participant information sheet dated for the above study. ☐
2. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
3. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my health care being affected. ☐
4. I agree to take part in the above study. ☐

_____	_____	_____
Name of participant	Date	Signature
_____	_____	_____
Name of researcher	Date	Signature

APPENDIX J: Introductory letter to caregivers

XXX XXXXXXXXX

XXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXX
XXXXXXXXX
XXXXXXXX

Tel: XXXXXXXXXXXX

Date

Dear family member/carer,

Re: Research Project

My name is XXXX XXXXXXXXXX and I am currently undertaking a Doctorate in Clinical Psychology qualification at the University of Edinburgh. One of the requirements of the course is that I carry out a piece of research.

The research I am carrying out aims to examine the coping skills, mental health, and perceptions of male and female carers of people with alcohol problems. Previous research has identified that males and females differ in the way they cope with the stresses and strains of caring for other people. This research hopes to look particularly at those carers of people with alcohol problems.

Please find attached an information leaflet that gives more details about the study. Read this before deciding to participate. If you have any further questions, please contact me on XXXX XXXXXXX.

If you decide to participate please complete the enclosed consent form and return it to me in the freepost envelope.

Thank you for taking the time to read this letter.

Yours Sincerely,

XXXX XXXXXXXXXX

APPENDIX K: GP letter

XXXX XXXXXXXXXX
Trainee Clinical Psychologist
XXXXXXX XXXXXXXX XXXXXXX
XXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXX XXXX
XXXXXXXXX
XXXXXXXX

Tel: XXXXXXXXXXXX

Date

Dear Dr.....

Re: *participant name, address, DOB*

I am writing to inform you that the above named individual has agreed to participate in a research project looking at the coping skills, mental health, and perceptions of carers of people with alcohol problems. His/her participation will involve filling in 4 questionnaires relating to his/her coping experiences, which should take approximately 20 minutes. He/she will be provided with feedback following the completion of the study.

Please do not hesitate to contact me if you wish to discuss any aspects of this letter.

Yours Sincerely,

XXXX XXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXX

[redacted]

NHS

[redacted]

Miss [redacted]

Date 14 February 2008
Our Ref [redacted]
Enquiries to [redacted]
Extension
Direct Line [redacted]
Email [redacted]

Dear [redacted]

Full title of study: **An exploration of the impact of gender on the attitudes, perceptions and mental health of carers of people with alcohol problems**

REC reference number: [redacted]

Thank you for your letter of 14 February 2008, responding to the Committee's request for further information on the above research and submitting revised documentation.

The further information has been considered on behalf of the Committee by the Chair.

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

Ethical review of research sites

The Committee has not yet been notified of the outcome of any site-specific assessment (SSA) for the research site(s) taking part in this study. The favourable opinion does not therefore apply to any site at present. We will write to you again as soon as one Research Ethics Committee has notified the outcome of a SSA. In the meantime no study procedures should be initiated at sites requiring SSA.

Conditions of approval

The favourable opinion is given provided that you comply with the conditions set out in the attached document. You are advised to study the conditions carefully.

NHS [redacted]

Approved documents

The final list of documents reviewed and approved by the Committee is as follows:

Document	*Version*	*Date*
Application	5.5	07 January 2008
Investigator CV		07 January 2008
Protocol	2	13 February 2008
Letter from Sponsor		25 September 2007
Letter of invitation to participant	1	04 January 2008
Participant Information Sheet: Client	2	04 January 2008
Participant Information Sheet	2	13 August 2008
Participant Consent Form: Client	2	04 January 2008
Participant Consent Form	1	03 January 2008
Response to Request for Further Information		14 February 2008
GP Letter	1	13 February 2008
Revised Illness Perception Questionnaire for Healthy People (Figueiras et al 2007)		
Family Attitude Scale (FAS; Kavanagh et al 1997)		
Coping Questionnaire (Orford et al 2005) (M-F)		
Coping Questionnaire (Orford et al 2005) (F-M)		
General Health Questionnaire (GHQ-12; Goldberg 1978)		
Clinical Trial Liability Insurance		20 July 2007
Supervisor's CV		

R&D approval

All researchers and research collaborators who will be participating in the research at NHS sites should apply for R&D approval from the relevant care organisation, if they have not yet done so. R&D approval is required, whether or not the study is exempt from SSA. You should advise researchers and local collaborators accordingly.

Guidance on applying for R&D approval is available from http://www.rdforum.nhs.uk/rdform.htm.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

APPENDIX L: Letter of approval from ethics committee

NHS

After ethical review

Now that you have completed the application process please visit the National Research Ethics Website > After Review

Here you will find links to the following

a) Providing feedback. You are invited to give your view of the service that you have received from the National Research Ethics Service on the application procedure. If you wish to make your views known please use the feedback form available on the website.
b) Progress Reports. Please refer to the attached Standard conditions of approval by Research Ethics Committees.
c) Safety Reports. Please refer to the attached Standard conditions of approval by Research Ethics Committees.
d) Amendments. Please refer to the attached Standard conditions of approval by Research Ethics Committees.
e) End of Study/Project. Please refer to the attached Standard conditions of approval by Research Ethics Committees.

We would also like to inform you that we consult regularly with stakeholders to improve our service. If you would like to join our Reference Group please email referencegroup@nationalres.org.uk .

08/S1101/5	~	Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely

[redacted]

fp Chair

Enclosures: *Standard approval conditions*

Copy to: [redacted]

1

[redacted]

APPENDIX L. Letters of approval from Ethics Committee

NHS

[redacted]

[redacted]

Date 27 March 2008
Our Ref
Enquiries
Extension
Direct Line

Dear Miss [redacted]

Study title: **An exploration of the impact of gender on the attitudes, perceptions and mental health of carers of people with alcohol problems**

REC reference: [redacted]
Amendment number: 1
Amendment date: 20 March 2008

The above amendment was reviewed at the meeting of the Sub-Committee held on 26 March 2008.

Ethical opinion

The members of the Committee present gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Protocol	3	20 March 2008
Protocol	2	13 February 2008
Causal Dimensions Scale	Russell 1982	
Notice of Substantial Amendment (non-CTIMPs)		20 March 2008

[redacted]

Headquarters [redacted]

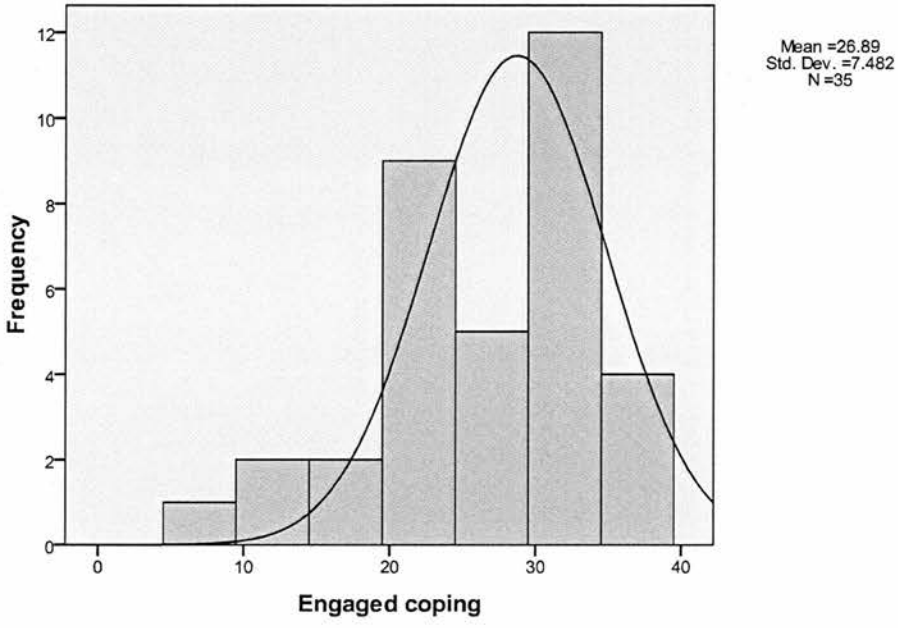
APPENDIX M: Normality tests

Variables	Sex	Shapiro-Wilk		
		Statistic	df	Sig.
Coping quotient	male	.934	20	.182
	female	.972	35	.511
Controllability	male	.958	20	.513
	female	.957	35	.190
Stability	male	.929	20	.150
	female	.971	35	.471
Locus of causality	male	.973	20	.809
	female	.979	35	.729
GHQ scores using binary scoring method	**male**	**.767**	**20**	**.000**
	female	.945	35	.080
Engaged coping	male	.953	20	.410
	female	**.926**	**35**	**.022**
Withdrawal coping	male	.966	20	.678
	female	.953	35	.144
Family attitude scale	male	.987	20	.989
	female	.977	35	.644
Tolerant coping	male	.956	20	.469
	female	.974	35	.554

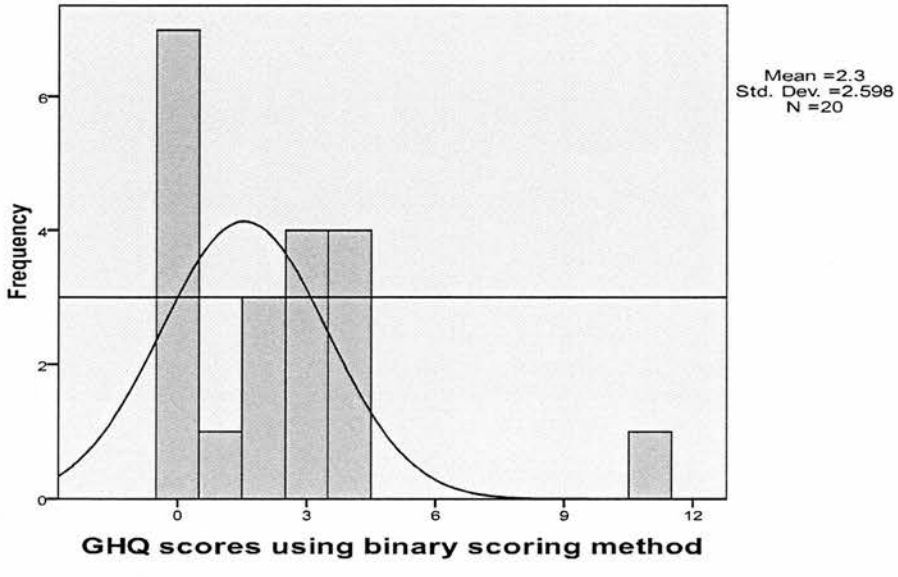
Non-normal data in bold.

APPENDIX N:
Histograms showing the distributions of scores for female engaged coping and male GHQ-12 scores

Distribution of female engaged coping scores including normal curve

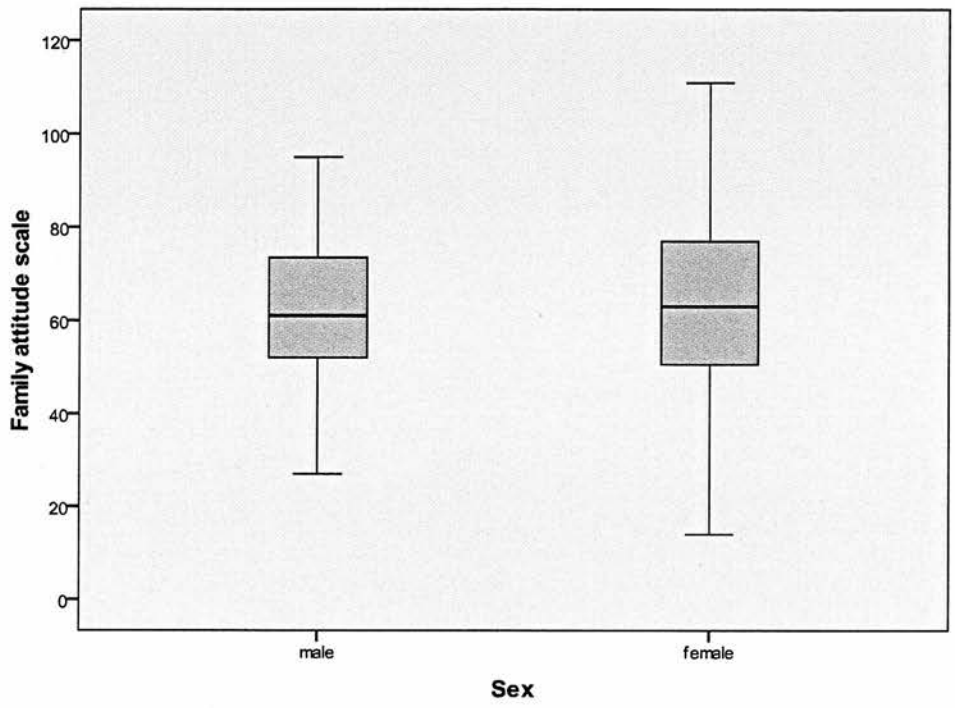


Distribution of male GHQ-12 scores including the normal curve



APPENDIX O: Boxplots of FAS scores

Boxplots representing the distribution of FAS scores for males and females



APPENDIX P:

Summary of male and female caregiver reports of the causal factors associated with a family member's alcohol problem

	Males	**Females**
Reaction to life events	5%	14.3%
Bereavement	------	14.3%
Family history of alcohol problems	------	14.3%
Loneliness	------	11.4%
Peer group influences	10%	8.6%
Low self esteem	10%	8.6%
Work related stress	------	8.6%
Breakdown of relationship	25%	8.6%
Depression	30%	5.7%
Lack of confidence	15%	2.8%
Has not received the help required	------	2.8%
Poor coping mechanisms	5%	2.8%
Lack of alternative things to do	------	2.8%
History of sexual abuse	------	2.8%
Social	10%	2.8%
Addictive personality	5%	2.8%
Enjoys drinking	------	2.8%
Anxiety	------	2.8%
Fear of failure	------	2.8%
Hedonistic lifestyle	------	2.8%
Financial difficulties/unemployment	5%	2.8%
Hiding from responsibility	------	2.8%
Lack of confidence	------	2.8%
Drowning out upset	5%	------
Growing up in isolation	5%	------
Psychological	5%	------
Lack of control	5%	------